

JPRS-UMA-92-039  
28 October 1992



**FOREIGN  
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# ***JPRS Report***

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## **Central Eurasia**

***Military Affairs***

**DTIC QUALITY INSPECTED 2**

**19980116 062**

REPRODUCED BY  
U.S. DEPARTMENT OF COMMERCE  
NATIONAL TECHNICAL INFORMATION SERVICE  
SPRINGFIELD, VA 22161

# Central Eurasia

## Military Affairs

JPRS-UMA-92-039

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28 October 1992

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## CIS/RUSSIA ARMED FORCES

### New Chief of Press Service Interviewed

92UM1462A Moscow KRASNAYA ZVEZDA in Russian  
11 Sep 92 pp 1,3

[Interview with Major General Valeriy Akimovich Chirvin, chief, Russian Federation Ministry of Defense Press Service, by Nikolay Gordin: "We Wish to Be Partners"; place and date not given; first two paragraphs are KRASNAYA ZVEZDA introduction]

[Text] Valeriy Akimovich Chirvin has been appointed chief of the Ministry of Defense Press Service, Russian Federation. He is 51 years old. He served in line units and is a graduate of two academies, one of them being the General Staff Military Academy. He holds the degree of candidate of military sciences. He was given his new assignment while occupying the post of deputy chief of the Information Directorate.

This is his first interview in his new capacity.

[KRASNAYA ZVEZDA] Valeriy Akimovich, before we begin, let me congratulate you on your appointment as leader of the Press Service.

[Chirvin] Thank you. This position has special meaning for me, even though I am no stranger to Army information structures. I worked for several years in the Information Directorate of the former USSR Ministry of Defense, after which I served a tour in the Main Headquarters of the CIS Unified Armed Forces. Now I find myself occupying the post of chief of the Russian Ministry of Defense Press Service.

Now about the makeup of the Press Service. It consists of three major components: the Press Center; Information Department; and Information Structure Coordination Department.

We have put together a congenial collective of like-minded people possessing firsthand knowledge of this kind of activity. They in the main are officers with years of service in line units, professional journalists. Incidentally, quite a few of them have completed the KRASNAYA ZVEZDA school. Thus, working with the news media are people who appreciate the value of newspaper reporting.

[KRASNAYA ZVEZDA] What basis are you employing to set up Press Service ties to the press, radio, and television—to what has come to be referred to as the "fourth power"?

[Chirvin] We are interested in establishing a partnership arrangement with all forms of the news media, regardless of the political persuasion the latter may possess. However, this in no way means that we are trying to play up to a particular medium or political party. The Army is depoliticized and departyized. That constitutes our fundamental basis.

Another important aspect I would like to mention is the mutual responsibility attendant to dissemination of information on the Russian Armed Forces and their

leadership. Unfortunately, there are some media that do not follow the indisputable rule, one reflected, for example, in the Law on News Media. There are publications and television programs that portray the Army in a distorted, biased manner. This apparently is a continuation of past stereotypes, in that anything said about the Army must be related only in negative tones. There would be some excuse for that if what is said is true, but some publications and broadcasts rely on hearsay, on unverified information, sometimes presenting outright lies.

[KRASNAYA ZVEZDA] What does the Press Service do in such cases?

[Chirvin] We always act on the same abovementioned basis. We react immediately. A case in point is a newspaper, one which considers itself to be "unbiased," which recently hurled a decidedly monstrous accusation at the Main Headquarters of the PVO [Air Defense] Troops. The allegation was that the latter issued a directive granting missile officers permission to—of all things—betray the Motherland. Yes, and this was published under a rubric making the same accusation. The truth here was that the matter was one of granting a zone of openness and glasnost in line units. A journalist saw something entirely different in that matter, going ahead to modify the situation more to his liking. The end result was that the publication itself suffered a loss of authority. The editors should apologize to the readers. As a matter of fact, the Press Service has yet to receive a reply to our refutation. Is not the honor of the uniform superior to everything else? We all operate by the golden rule: We all come under the same law. No one should harbor any delusions on that score. I hope that that publication can gather sufficient courage to make a public acknowledgement of its slip.

Or take another instance. An agency disseminated information on a loss of nuclear munitions in the Far East. This included a reference made to a statement allegedly issued by the head of the local administration. The canard was propagated by newspapers, with caustic comments ensuing. Incidentally, a KRASNAYA ZVEZDA correspondent we put on the story ascertained that the administration had not issued any "sensational" statements, that the matter was a pure fabrication. It would appear that the thing to do would be to apologize to the readers and punish the unscrupulous worker. However, the news agency was "no longer interested" in the matter and had no intention to pursue it any further.

It seems to me that it pays to realize that there exists in addition to the "fourth power" an executive, legislative, and, finally, judicial power. There exist—and will continue to exist—eternal truths concerning honor, dignity, and elementary professional decency.

[KRASNAYA ZVEZDA] I agree with you fully. We, journalists, bear responsibility to present the news accurately. However, you most likely share my feeling that



much depends upon those who provide us with news. Is it not tempting to "screen" the news or make "corrections"?

[Chirvin] Certainly not. The Army and society are bound together by thousands of strings. Also, this is not a time for setting up filters of any kind. Society has a need for truth as much as its does air to breathe; the army, for information on processes occurring in society. The question is: Is it in our interests to conceal the truth?

The Russian Armed Forces are experiencing the most difficult period since their creation and establishment. The Press Service's task is to employ the news media to effect wide dissemination of information on changes occurring within the Army. It should be understood that the Army, the same as armies of other states, did possess and does presently possess military secrets. Military units never will become an open courtyard for persons who delight in scandalous affairs. However, what we are now discussing is another story. The greater the objectivity of news of general interest offered by the media, the greater the advantage to the Army.

The Russian Ministry of Defense shares the above point of view. Army General Pavel Sergeyevich Grachev, the minister of defense, meets with representatives of the press willingly and frequently. He holds these meetings on a nearly weekly basis.

The Press Services's routine work includes—in addition to the traditional briefings and press conferences—something new: deputy ministers of defense holding meetings with media representatives. We have our own name for this: the "Press Hour." In this manner, we provide journalists with news of interest to them, and they let us know what they think. I believe that persons participating in those meetings are pleased with the dialogues with Andrey Afanasyevich Kokoshin and Valeriy Ivanovich Mironov. Other deputy ministers and the heads of a number of main and central directorates of the Ministry of Defense have expressed their willingness to maintain this kind of unofficial contact.

There has been a recent increase in the amount of news provided journalists by the Press Service. That is why we have set up in the Press Center a 24-hour telephone line. (The number to dial is 293-33-13).

KRASNAYA ZVEZDA readers must have read and formed opinions on articles appearing under the rubric "RF Defense Ministry Press Center Report." We can now introduce into that rubric the term "Press Service."

We are also actively pursuing other avenues of contact with the writing fraternity, including trips to "hot spots" under the aegis of the Press Service. For example, just the other day we dispatched to Abkhazia a group of journalists who accompanied Russian representatives who are members of the mixed Commission on Monitoring and Inspection of the Armed Conflict Zone in that area.

In a word, we are working on matters, and we intend to continue to make progress.

### Interview with New Training, Assignments Chief Vysotskiy

92UM1458B Moscow KRASNAYA ZVEZDA  
in Russian 15 Sep 92 pp 1,2

[Interview with Lieutenant-General Yevgeniy Vysotskiy, chief, Main Cadre Training and Assignment Directorate, Russian Federation Ministry of Defense, by KRASNAYA ZVEZDA correspondent Oleg Falichev: "We Need a Strong Russia"]

[Text]

### Biographic Sketch

Yevgeniy Vasilyevich Vysotskiy was born on 4 April 1947 in the town of Belovo, Tula Oblast. After graduating from the Tashkent Higher Tank Command School in 1970, he served as platoon leader, company commander, and tank battalion executive officer in the Southern Group of Forces. He then graduated from the Military Academy imeni M. V. Frunze (in 1978) and the General Staff Military Academy (in 1988). While occupying the post of first deputy commander of the Transbaykal Military District, in August of 1992 he was appointed to the position of chief of the Main Cadre Training and Assignment Directorate, Russian Federation Ministry of Defense. A Hero of the Soviet Union, he holds the rank of lieutenant general.

The general is married and has a son.

[KRASNAYA ZVEZDA] Yevgeniy Vasilyevich, the information on you contained in KRASNAYA ZVEZDA files is rather limited. May we start by your telling us something about yourself?

[Vysotskiy] Well, all right. I lived very little in the place where I was born. I travelled with my father as he did his tours of duty in the Far East, Central Asia, etc. After I became an officer, I saw the same places a second time on my tours of duty. For example, after completing my studies in the Academy imeni Frunze, I was assigned to the Turkestan Military District, which already was familiar to me. I also went there via Afghanistan. Then there were Sakhalin, Chita, etc.

[KRASNAYA ZVEZDA] It seems that you are well acquainted with living "out of a suitcase."

[Vysotskiy] Quite so. I was also transferred from station to station within districts. The long and the short of it is that my wife—a native of Turkmenia—has plenty of experience packing suitcases.

[KRASNAYA ZVEZDA] You mention your Afghanistan tour. It so happens that Afghanistan, where you became a Hero of the Soviet Union, is a landmark in the history not only of yourself, but of the country as well. In this connection, this is a topic on which definite views are stated. What can you say about people who served there?

[Vysotskiy] I can tell you one thing: They are the kind of people on whom you can rely. The main thing they acquired in Afghanistan is a feeling of responsibility, one

of first making sense of a situation, then doing something about it. If one is to take a close look, he will see that the "Afghans" are today in the forefront of difficult areas of the Army. It is they who as a rule are carrying out tasks under extreme conditions. A person can find a dirty spot in the cleanest room if he looks long enough.

[KRASNAYA ZVEZDA] Your mentioning of extreme conditions brought General Lebed to mind. His name is well-known. Is this not because he instilled in many people a feeling of conviction, of the righteousness of our cause, of the fact that evil will not go unpunished?

[Vysotskiy] We are sons of a great power and must defend her interests. Lebed in his manner may have been rather caustic, overly active, but we always did say that the best defense is an offense.

[KRASNAYA ZVEZDA] Not much time has passed since you assumed your post. What are your first impressions?

[Vysotskiy] First and foremost, it is a big job, one certainly not as routine as it may seem. Each individual, each personal matter, has its own story. Large numbers of men in uniform have been removed from their posts over enormous areas. It is necessary to look into everything, to make judgments. There is much that obviously is not carried to the end "at the bottom." For example, I recall the haste with which our troops were withdrawn from Mongolia. Equipment, personnel, families, children—everything got mixed up.

[KRASNAYA ZVEZDA] Nonetheless, there must be problems that should be resolved as a matter of priority.

[Vysotskiy] Of primary importance here is withdrawal of our troops from the "hot spots," the Baltics, and the Transcaucasus. Not all units have been assigned a definite schedule as of the present. This is a cause of justifiable concern on the part of people. And so, the problem is quite acute.

[KRASNAYA ZVEZDA] All the more reason to discuss it openly. The fact is that, with the disintegration of the USSR, thousands of officers and their families found themselves outside the borders of Russia through no fault of their own. In some places, in the same Baltics, they are being referred to as occupiers. In the Transcaucasus they can be taken hostage or killed without retribution. No wonder that many wish to return to Russia. And people are returning. However, not everyone is so fortunate. Does it not appear that Russia has left them to the mercy of fate?

[Vysotskiy] The mercy of fate? That hardly applies. There is no doubt that conditions are difficult for all of us. Troops have returned from groups of forces and Mongolia virtually all at once. Now there are the Baltics, the Transcaucasus. They must be assigned somewhere and provided for. But how? Finding everyone a new duty station is problematic, of course. Transfers can be made only if vacant slots exist. What if there are none?

However, protective social machinery has been set up and is functioning. Of what kind? An officer can be carried on the rolls up to one year while a search is made to locate a slot. (Incidentally, about 16,000 persons are in this situation.) We are discharging those who have served out the term of service, without granting any extensions. The paperwork is performed in the Ministry of Defense. This involves arranging for retraining of unassigned officers so that they can find employment with civilian enterprises and other civilian structures.

Recently made was a decision to carry out rating of officers within short time periods. The directive sets rather rigid requirements. The purpose here is to retain in the Army those people who are the most suitable, those possessing the best military training.

[KRASNAYA ZVEZDA] I can understand that; such a large knot is not one that can be untied all of a sudden. Incidentally, could you tell us how many officers are presently serving in sovereign states? What kind of numbers are we dealing with here?

[Vysotskiy] To be sure. About 13,000 men. In Ukraine, there are 11,883; in Belarus, 389; in Azerbaijan, 617; in Armenia, 262; in Georgia, 6; in Kazakhstan, 107; in Moldova, 389.

[KRASNAYA ZVEZDA] About two years ago, KRASNAYA ZVEZDA published a series of articles dealing with the issue of discharging of officers on their own request. That problem presently supposedly does not exist. Nonetheless, letters are still being written by those who are not being permitted to request discharge on, so to speak, "good terms."

[Vysotskiy] The Supreme Soviet has passed a law that allows an officer who has served five years and longer to receive a discharge by his own request. The minister of defense has even issued an order to that effect. Cadre organizations are quite agreeable to this and are not creating any obstacles for anyone in this regard.

[KRASNAYA ZVEZDA] May we say that the previous practice of sometimes discharging suitable people with prejudice or as unfit for duty is undesirable?

[Vysotskiy] Yes. A man should have the opportunity of dealing with his personal situation as he sees fit. This is the case in all civilized societies.

[KRASNAYA ZVEZDA] Yevgeniy Vasilyevich, you obviously have a personal vision of reforming the Armed Forces. Do you concur with everything that has been done and is being done in the Army?

[Vysotskiy] Economics should underlie everything. This however is not always taken into consideration. The monies presently being appropriated for the Army do nothing to accelerate the process of reforming the Armed Forces, of course. Even the minister of defense and many scientists have discussed this. In this connection, the time has come to implement a contract system, a system of offering material provisions to the Armed Forces. However, you can see for yourself that, without the

necessary funds, this is not possible. And the treasury is empty. The end result is that reform of the Army depends on economic reforms of the country. Until the country emerges from the present crisis, well...

[KRASNAYA ZVEZDA] Does it not seem to you that we sometimes are blindly copying the West, obediently carrying out its orders?

[Vysotskiy] I would not go so far as to say that. In this connection, in the Army continuity does remain. We may have adopted to some degree the contract system. But our system of cadre selection, assignment, education, and training has justified and continues to justify itself. And as far as creation of rapid deployment troops is concerned, I do not think that this is copying. This is rather dictated by the times.

[KRASNAYA ZVEZDA] But what about moral values? It used to be that the soldier fought for an idea, so to speak. Now, with the scale of moral standards washed out, when everyone is busy acquiring riches, what is he—a poor devil in tarpaulin boots—to do? What is to motivate the commanding officer of a submarine or missile-armed craft who is paid less than—and pardon me for saying this—the director of a cooperative rest room, or a person who produces nothing, if we are to speak of providing protection for these people, at the cost of risking his life? This incidentally is not so much my question as that of KRASNAYA ZVEZDA's readers.

[Vysotskiy] That which has occurred in our country in the last few years may be equated with a social revolution. Yes, values are being rethought. New viewpoints, new social principles are taking shape. At the same time, certain economic structures are developing at a faster pace. It so happens that the commercial structures have shown themselves to be more flexible, naturally becoming part of our awareness. However, just like a locomotive, they will definitely pull behind them everything else associated with our society. This includes the Army. For the present, I do agree with you, there is a vacuum here. There obviously is a need for some other structure, one which would raise our awareness not by means of conclusions reached relative to Suvorov or Kutuzov, but one which would produce a new system, with the latter based on general human values, not only on patriotism. All these factors enter into the creation of a new kind of protector of the Motherland, into his general outlook. But for this to happen, you will agree, what are required are a proper base and time.

[KRASNAYA ZVEZDA] I suppose so. But it would be difficult to explain that to military folks. Here is another question: The privatization process is proceeding at headlong speed. Plants, factories, stores—everything is being taken over not only by toilers, but by shadow structures as well. But what is the military man to privatize? A tank? A piece of artillery? Can he enter the market on an equal footing as compared to the rest? Will things get to the point where an officer with 25 years of conscientious service must resort to seeking employment

by a person released from the Army, with prejudice, but nonetheless one who is successful at becoming an owner?

[Vysotskiy] The Army system, other structures under the Ministry of Defense, and the government are engaged in an effort the specific goal of which is to provide the officer with an equal footing. In this connection, I feel that the President's statements relative to the provision of social protection to military men are merely in the implementation stage and not yet a reality. I believe that compensation should definitely be made commensurate with involvements related to performance of military labor. This would probably be more for the future rather than the present. Sooner or later, the officer will be paid an amount whereby he will have no need to be concerned with privatization. It would be proper to note here that you are correct in what you said about an equal footing.

[KRASNAYA ZVEZDA] In Ukraine and in certain other republics, it is seen that the top posts in military structures are filled largely by persons of native origin. Is ethnic origin a factor in assignments in the Russian Army?

[Vysotskiy] No, it is not. The sole requirement is for a person to possess a desire to serve in the Armed Forces of Russia.

[KRASNAYA ZVEZDA] There are officers who have pulled several tours of duty in foreign countries. And there are those who begin and end their service in the Urals area. How do you—a person who has been sent all over—feel about that? Can this kind of practice continue?

[Vysotskiy] Measures in progress are aimed at rectifying that kind of situation. The minister of defense himself believes in a proper approach. The list of persons to be sent to Germany as replacements will name those who have seen service in the Transcaucasus and other "hot spots," persons who have suffered a blow to their material well-being as well as their morale. You will agree that this approach certainly is just.

[KRASNAYA ZVEZDA] Now for a traditional question. You have much to do in your new post. But you must have some free time. How do you spend it? What do you like to do for relaxation?

[Vysotskiy] Hmm...Free time? (Laughter.) With a 12-hour working day? Generally speaking, if I did have some, I would like to go for a swim in a pool. There may come a time when I can do that. As for relaxation, I like sports. I feel that an officer is definitely obligated to hold his own in playing sports. Unfortunately, someone has forgotten that in effect is an order issued by the minister of defense dealing with physical training.

[KRASNAYA ZVEZDA] One more question. What are your feelings toward the press, KRASNAYA ZVEZDA in particular?

[Vysotskiy] I could call that a tricky question. KRASNAYA ZVEZDA reports on events as they occur. The times change, so do the newspaper's style, but it is not for

me to tell you what to do. Be that as it may, I would like to see more information on comparison with foreign armies. What kind of information? Primarily analytical. What everything is like there compared to here in our country. What is better, what is not as good. The purpose would be to inform our legislative structures, in which there is much talk of a professional Army, that professionalism is more than just the ability to shoot and to lead, but also the provision of well-thought-out benefits, social guarantees, definite obligations the government must assume relative to the person. This is the time to focus attention on the matter. Why? Because the passing of adequate legislation by our legislators is still up in the air. If not handled successfully, this matter will cause us to lose the intellectual resources resident in the Army.

[KRASNAYA ZVEZDA] Are you saying that the above would benefit the Army's authority and the respect people would have for it?

[Vysotskiy] Definitely. We may embrace our new allies as much as we wish, but no one will help our Army become strong and modern; this holds true for the country as well. In addition, the cause of peace will not be furthered if we are weak. A case in point is the Kuriles and our giving them back to Japan, a topic about which much is being said. But there is something you will not see in print: Japan, which has tied the rendering of assistance to us to the resolution of the territorial problem, has a military budget of 30 billion dollars! Is this figure comparable with our military budget? Why does a country as small as Japan require an enormous military budget? What is the point, what with our saying that the "cold war" is gone and the threat nonexistent?

Our people should know the entire truth; then the process of reducing our Armed Forces would proceed in an orderly manner, not helter-skelter. To say nothing about NATO, the SDI, and ongoing nuclear weapons testing in Nevada. Alas! Our hopes for reciprocity in this area have not been justified.

[KRASNAYA ZVEZDA] Then it would appear that a weak Russia is of no use to anyone.

[Vysotskiy] A weak Russia is of no use even to her own people. Hence the need to restore the state's power. Only then will the state have a future.

#### **Troops in Tajikistan Transferred to Russian Jurisdiction**

92UM1458A Moscow ROSSIYSKAYA GAZETA  
in Russian 16 Sep 92 p 6

[Russian Federation Presidential Decree No 1068 on Transfer of Troops Stationed in Tajikistan to Russian Jurisdiction]

[Text]

#### **RUSSIAN FEDERATION PRESIDENTIAL UKASE**

##### **Transfer to Russian Federation Jurisdiction of Military Units Stationed on Republic of Tajikistan Soil**

To pursue the maintenance of stable management, assure effective troop operation, and secure social protection for servicemen, their dependents, and for laborers and workers of the Armed Forces of the former USSR stationed on the soil of the Republic of Tajikistan, I hereby declare:

1. To transfer the large units, military units, installations, enterprises, organizations, and other military management agencies of the Armed Forces of the former USSR stationed on the soil of the Republic of Tajikistan to the jurisdiction of the Russian Federation, with subordination to the Russian Federation minister of defense.
2. To instruct the Government of the Russian Federation to conduct negotiations with the Government of the Republic of Tajikistan relative to the legal status and terms associated with the presence of troops under Russian Federation jurisdiction on the soil of the Republic of Tajikistan.
3. To state that the costs of maintaining the Russian Federation troops stationed on Republic of Tajikistan soil will be covered by the republic budget of the Russian Federation.
4. To designate Colonel General Eduard Arkadyevich Vorobyev as the fully-authorized official representative of the Russian Federation for matters of Russian Federation troop presence on the soil of the Republic of Tajikistan.
5. To direct the Russian Federation official representative for matters of Russian Federation troop presence on Republic of Tajikistan soil to take measures for assuring the security of military personnel, dependents of the latter, laborers and workers, for preventing the involvement of abovementioned personnel in interethnic conflicts, and for countering attempts at theft of weapons, military equipment, and military facilities.

[Signed] President, Russian Federation  
B. YELTSIN  
Moscow, The Kremlin  
9 September 1992  
No 1068

#### **Numbers of Military Pensioners**

93UM0010A Moscow KRASNAYA ZVEZDA in Russian  
30 Sep 92 p 2

[Article prepared by Vladimir Vdovin and Aleksandr Batrakov, from the Main Directorate of the Military Budget and Financing of the Ministry of Defense and KRASNAYA ZVEZDA Correspondent Petr Altunin: "Coming to KRASNAYA ZVEZDA For Advice—The Pensioners' Encyclopedia"]

[Text] The first installments of the "Encyclopedia" evoked unfeigned interest from our readers and primarily



the military pensioners. They have sent in questions, commentaries for replies, proposals and requests. Considering these, we are continuing the column.

[Reader Letters]

How many pensioners are there in the CIS?

M. Yegorov, lieutenant colonel (retired) (Moscow):

It would be interesting to know how many at present we are who receive, as they say, military pensions?

[Editors' Reply]

Persons having the right to pension support under the military department in the CIS countries at present number over 1.2 million persons. Including 800,000 in Russia. Among them are over 200,000 participants and disabled of the Great Patriotic War.

[Reader Letters] What types of pensions are there?

P. Alekseyev, Major (Khabarovsk):

I have heard that now it is possible to retire on pension after service of 15 years. Please explain generally what types of pensions can be given to servicemen and their families?

[Editors' Reply]

First on the types of pensions. This is for the number of years served if upon the day of discharge 20 and more years have been served. The right to this pension is not made dependent upon the age of the serviceman and the reasons for his discharge from service.

The right to a pension is given to officers discharged because of age, sickness, reduction in personnel, or limited state of health when they on the day of discharge have reached the age of 50 and have a total length of employment of 25 calendar years of which at least 12.5 are comprised of military service. Let us stress that the length of employment (at least 12.5 years) is taken into account only upon reaching the age of 50.

Further: servicemen who have been judged disabled because of military service. This is already a disability pension. This is granted regardless of the length of service.

And the pension in the event of the loss of the head of the household. According to the general rule this is granted to the members of the serviceman's family who are unable to work and who were supported by his disability.

As for the granting of a pension for 15 years service, there is no law dealing with this. There is the different matter that a draft law has been prepared on the status and social guarantees for the servicemen and this sets for the servicemen who have served 15 years a payment of social assistance (not a pension!) for five years from the day of discharge and amounting to 40 percent of the pay. Above 15 years, for each year another 3 percent is added. This social assistance, in our opinion, will help in the adaptation of the former servicemen to civilian conditions, and its temporary nature is due to the fact that the

persons discharged without the right to a pension are young persons who are capable of mastering a new profession and find themselves under civilian conditions. For this reason the social assistance must be viewed as material support for such servicemen during the transitional period.

[Reader Letters]

Who is to be considered a disabled war veteran?

P. Meshkov, Captain (Retired) (Perm):

I read the newspapers and in particular the weekly VETERAN and I see that numerous slights have built up against the disabled war veterans, including at the military commissariats, the medical commissions and from various administrators: either they are totally deprived of their disability pension, or if it is granted, it is now what it should be. Who "sets" the disability group and on the basis of what documents?

[Editorial Reply]

The disabled of the Great Patriotic War are former servicemen the disability of whom has come about from wounds, concussions or maiming sustained in the defense of the USSR or in carrying out the duties of military service or from illness contracted while serving on the front during the period of the Great Patriotic War or other combat, including in carrying out international duty.

Disability is set by the military-labor expert commissions (VTEK) which are run by the bodies for the social protection of the Russian population. The grounds for recognizing disability are the military medical documents and these are: a sickness certificate or ruling of the VVK [Military Medical Commission] as well as information from the military-medical institutions (medical units, hospitals, Military Medical Museum, the district VVK and the Central VVK). In the absence of such documents the causal link to the consequences of the wound, concussion or maiming can be established by the military medical commissions. In this instance the grounds for granting them are the combat recommendations, certification materials, presentation for a military rank or decoration, the military card, the service record, if these mention a wound (concussion, maiming).

But even if there are no such documents, a method has been established for the direct certification at the VVK under the military commissariat with the participation of a military medical expert. Here they take into account the bodily injuries.

Also among the disabled war veterans are the servicemen who were disabled as a consequence of wounds, concussions or maiming sustained in carrying out the duties of military service, including injury caused by exposure to radioactive substances, ionizing radiation and so forth.

### Rising Crime Within Military Outlined

934C0084A Moscow ARGUMENTY I FAKTY  
in Russian No 40, Oct 92 p 8

[Statement by Judicial Service Major General L. Obektov, military prosecutor of the Moscow Garrison, in response to reader's letter]

[Text] If it were not bad enough that our Russian soldiers are dying in the course of someone else's interethnic conflicts, the crime rate is not going down within the units themselves, even in the vicinity of Moscow. How much longer can this go on?

[Signed] N. Panova, Staryy Oskol

We asked Judicial Service Major General L. Obektov, military prosecutor of the Moscow Garrison, to comment on this letter.

We registered an upward trend in the crime rate in the army as early as 1989, and it has coincided with the curve of the growth of the crime rate in our country. In the eight months of this year, 854 crimes were recorded in military units, establishments, and organizations which are within the jurisdiction of our prosecutor's office (there were 498 crimes during the corresponding period of 1991; the growth rate is 71.5 percent). The number of premeditated homicides increased (by 71.4 percent; 26 servicemen have already died), as well as rapes (by 60 percent), thefts of state property (by 125 percent) and personal property (by 300 percent), and crimes associated with the acquisition, possession, and sale of narcotic substances (by 80 percent). Some 57.3 percent of the crimes were committed by military construction personnel or with their participation.

Most recorded crimes are investigated while the trail is still hot, despite investigators of the military prosecutor's office being considerably overworked (each of them handles 20 to 30 cases simultaneously; more than one-third of the investigator positions are vacant because of low salaries).

### Andreyev of Military-Sociological Research Center Interviewed

93UM0030A Moscow KRASNAYA ZVEZDA in Russian  
3 Oct 92 p 1

[Interview with Colonel Gennadiy Petrovich Andreyev, chief of the Armed Forces Center for Military Sociological, Psychological and Legal Research, by Sergey Popov; date and place not given: "The Opinion of the Army Community Must Not Be Ignored. Which Means We Must Know What It Is"]

[Text] We have never had a problem speaking for the entire army. It was sufficient for a great military chief to assume an important pose and proclaim in weighty words: "The opinion is...." But as for how much what he said reflected what the army was actually thinking is another matter. Our correspondent discusses this and other problems of studying public opinion in the army with Colonel

G. Andreyev, chief of the Armed Forces Center for Military Sociological, Psychological and Legal Research.

[Popov] Gennadiy Petrovich, having persuaded myself on several occasions that the gap between the official point of view in the army and what is actually being thought and said in the forces can be colossal, let me ask this: Has the size of this gap changed?

[Andreyev] Let me qualify right away that we need not necessarily have agreement here. Public opinion is always free, and the official point of view is tied to policy, to the possibilities of the present moment and so on. Moreover research shows that this opinion on each separate issue breaks down into two, three or more stable, often mutually exclusive opinions. So from which one of these do we measure the distance to the official point of view? However, if we look at the issue generally, I will have to say that quite definitely, the gap has decreased considerably.

Besides the research we are conducting on 14 permanent topics, we are also doing a considerable amount of operational work in response to orders placed by the Ministry of Defense, the General Staff and interested committees of the Russian Federation Supreme Soviet. In contrast to former years, we have now started working directly for the Russian government, studying for example, at its request, the opinion of servicemen on the socioeconomic reforms currently being implemented. You must agree that this interest arises for some reason other than that the "clients" don't know what to do with their time.

[Popov] However, it is important to the serviceman to have his opinion not only heard but also heeded.

[Andreyev] Let's be realists. What you refer to as the official point of view is associated with the need for adopting administrative decisions affecting the destiny of thousands. Some say: "We've voted here, so now let the parliament vote as well," but this variant is often based only on emotions. Hence arises the danger of substituting clear administrative decisions by public opinion: Well, let's see the way things are leaning today. Meaning that there should be a very precise balance here.

[Popov] But I can cite a mass of examples where public opinion in the army has been found to be wiser than the official point of view. Do you recall the hostility with which the latter reacted to the idea itself of professionalizing the army, even though it was accepted in the forces right away?

[Andreyev] I agree completely: There is much more common sense in the army than is sometimes thought. But our "hearing" is not the only thing that is improving today. Consider for example that a number of official decisions have recently been adopted with regard for our center's research: directives of the defense ministry regarding suicide prevention, the granting of the right to officers to leave the army after five years of service. And what about the multiple increase in the pay of servicemen? Isn't this an item that is indebted to public

opinion for its inclusion in the state program for social support of servicemen? Did you notice that a statute regarding establishment of the institution of so-called confidential agents was in the initial draft of the Law on the Status of Servicemen? It is no longer there. Our surveys showed that it is unacceptable to public opinion in the army today.

Still, speaking as a scientist I would caution against faith in "collective wisdom." While there is much that is valuable in it, public opinion in both the society and the army often tends toward extremes, and it tends to change. We know for example that the Russian army had an extremely unfavorable view of Barklay-de-Tolli. At the same time, both Kutuzov and specialists later on unanimously came to recognize Barklay's talent as a troop commander, and the decisions he made as the only valid ones.

And now? In surveys, many servicemen are clearly in favor of developing commercial farms. But when they are asked directly: "Would you personally be willing to work on such a farm?", the number of supporters decreases to a third. What can I say? It's not difficult to be "wise" when you don't have to assume any obligations or responsibility.

[Popov] In such a case, how do you specifically go about defining what this "collective wisdom" is, and what is the general mechanism by which public opinion is studied in the armed forces?

[Andreyev] We use the same procedure as do similar "civilian" entities, for example the All-Union Center for Public Opinion Research. In one of our usual tours of the forces to study a particular issue we questioned on the order of 1,200 persons. And while the Gallup organization in the USA takes a nationwide sample of 1,500 persons and uses the results to make an accurate prediction of, for example, who will vote for what presidential candidate, we also assume the responsibility of speaking for the entire army. In any case during the Russian Supreme Soviet elections we studied opinions of several candidates, and our margin of error was less than 3 percent.

But if we look at the big picture, our center is but an element of a system for studying public opinion, one that works with the standard surveys of servicemen mentioned above, confidential telephone hotlines, commander's mailboxes and so on. The problem is that despite all of this, a complete system for studying public opinion has not yet evolved in the army. The "vertical" channel is absent from the plan for studying sociopolitical and social problems. The kind that had existed for example in the Czechoslovak army, in which officers were required by directives to regularly determine the opinion of subordinates in relation to a broad spectrum of problems.

There is another problem as well. Here is a funny story going around that has some element of truth: The General Staff of the old Russian army kept on an old captain whose only responsibility was to read documents

prepared for signature. And if the captain, who was the embodiment of army experience and common sense, didn't find anything wrong with it, the document would come to see the light. What we want to do is have the army itself become this wise "captain." We want to organize expert evaluation of public opinion on various legal acts submitted by the military department in support of decisions adopted by the state. After all, sometimes such documents contain things which the army wouldn't accept even on a purely psychological basis—for example, a requirement that those who are to serve on a contract basis must live in barracks. We are sometimes forgotten in such instances.

[Popov] As I understand, you work mostly on orders from interested organizations. What if you get results that the official point of view finds "inconvenient"?

[Andreyev] Well, newspapermen are not the only ones who have experienced such censorship. In its time the center worked under the control of the Main Political Directorate, and it was precisely the latter that decided what public opinion was "needed" by the troops (this is even after conducting scientific research!), and which was unneeded. During the time that the functions of political organs were being delineated from those of party organizations, we reported for example to General Shlag the opinion of the army community, which divided into those for taking the party out of the army and those in favor of the existence of party organizations with extremely limited functions. In response to this, the chief of the Main Political Directorate announced that military council members were reporting something different to him. Does this mean, then, that they were deceiving him? Several conclusions were made regarding our work after this. Naturally, the research was put under wraps.

It stands to reason that "inconvenient" results also come up today. As in the society, the ratings of a number of politicians have recently been falling, servicemen of some regions are very skeptical about the results of meetings between the leaders of CIS countries, and so on. And there are chiefs who wouldn't want the center to study opinions in their units. But the truth is simple: Public opinion existed in the army of the past, it exists in the present, and it will exist in the future, and it will exist as it is, and not as something else. We very much need a clear, well-tuned system for studying public opinion in the armed forces.

[Popov] But in summary, what then is this public opinion today?

[Andreyev] Very briefly, I would describe it like this. Public opinion primarily reflects the high hope of servicemen for resolving all of the difficult problems inherited by the Russian army presently undergoing development, and it simultaneously reflects the high social tension in military collectives connected with processes occurring in the country. And finally, it continues to represent the collective wisdom of the army, which has still not been fully tapped.



## CIS: POLICY

### Lata Answers Readers on Impact of New Defense Law

93UM0063A Moscow KRASNAYA ZVEZDA in Russian  
13 Oct 92 pp 1,3

[Interview with Colonel Vasilii Filippovich Lata, first deputy chief of the Directorate for Military Organizational Development and Reform under the Ministry of Defense of Russia, by KRASNAYA ZVEZDA correspondent Anatoliy Dokuchayev: "Military Reform in Russia Can and Must Be Accelerated With Laws"]

[Text] The Law on Defense was finally passed in September. Along with the Russian Federation's Law on Security it created the foundation for working out other bills and introducing them in the Supreme Soviet. At the fall session it is planned to consider an entire package of defense bills. This is encouraging to military personnel and to army and navy veterans. At the same time, the editorial office is receiving hundreds of letters expressing concern about whether the laws measure up to contemporary needs, whether they will protect the people in shoulder boards legally and socially and whether the lawmakers will hear what the military community has to say. Our correspondent addressed many of the questions contained in the letters to Colonel Vasilii Lata, first deputy chief of the Directorate for Military Organizational Development and Reform under the Ministry of Defense of Russia.

[Lata] We share the alarm of the KRASNAYA ZVEZDA readers, particularly since we too receive a vast number of letters. The organizational development of the Russian armed forces cannot be completed without finalizing the legal and normative foundation. In addition, the vital functioning of the army and navy is being affected today by the difficult economic and sociopolitical circumstances. Legal enactments which are thoroughly conceived and weighed and which take into account the interests of the state and of Russia's citizens are doubly essential in this situation.

[Dokuchayev] Nikolay Filippovich, the readers feel that it is not enough for the Ministry of Defense to share their concern. They expect a vigorous stand on the part of the military department. It must inform the parliamentarians of the suggestions and desires of military personnel and veterans of the army and navy.

[Lata] First, a small clarification. The present constitution extends the right of legislative initiative to the Supreme Soviet in the person of its committees, commissions and chambers, the Presidium and its chairman, the president, the people's deputies, subjects of the federation, public organizations and a number of other agencies. Government, ministries and departments, including the Ministry of Defense, do not have that authority. At the same time, in view of the importance of establishing a legal basis in keeping with the need to strengthen the nation's defense capability which would

create the necessary conditions for our citizens to perform productive military service, parliament is calling upon military experts to help draw up the draft laws.

The ministry's board has assigned the preparation of proposals for legislative enactments on defense matters for consideration by the Supreme Soviet to the Commission on Legislative Work specially set up for this purpose. Army General Konstantin Kobets is in charge of it. It coordinates all such work in the Ministry of Defense and organizes interaction with commissions and committees of the Directorate of Military Organizational Development and Reform.

[Dokuchayev] And what is the situation right now with respect to writing up draft laws?

[Lata] Two documents, the Law on Security and the Law on Defense, have been accepted in Russia as our basic guide in the area of defense. They do not embrace all of the areas of interest to us, however. We already urgently need some new laws: on military duty and the military service, on the serviceman's status, on alternative service, on state secrets, on mobilizational readiness and on martial law. We must have a decree by the Supreme Soviet calling for an experiment in filling positions for army and navy enlisted men and NCOs by contract and ratification of the SNV [Strategic Offensive Weapons] Agreement, the Agreement on Collective Security, and a number of other bilateral agreements between Russia and the other commonwealth states.

Parliament's agenda for the last quarter of 1992 includes more than 300 draft laws and decrees. Specialists with the armed forces estimate that it will consider no more than 110-120 items during the fall session, while the rest (around 200) will be postponed until next year. Most of the pieces of legislation affect the interests of the armed forces to one degree or another, and we need to keep an eye on them, so to speak. We are focusing our main attention on the draft laws which I have enumerated, however, which will directly determine future military organizational development in Russia.

[Dokuchayev] Is the ministry of Defense Satisfied with them?

[Lata] A draft law has been worked out in the parliament's Committee on Defense and Security which takes into account our proposals (more than 80 percent of the 56 submitted were taken into account) and those submitted by other ministries. It generally conforms to the interests of the military department. I hope that if the law is passed, it will meet with the approval of the public.

We have not yet completely worked out the conditions for granting deferments from the military service, however—deferments for professional reasons, for example. We are not satisfied with the procedure for training specialists for the army and navy within the system of vocational and technical training. We feel that it should be mandatory, whereas the draft law defines it as voluntary.

We do not yet fully understand the expediency of establishing military ranks for positions along with the traditional ranks. We have doubts about the elimination of the military ranks of senior sergeant, senior warrant officer and junior lieutenant and their equivalents as proposed in the draft law. There are several tens of thousands of servicemen and citizens in the reserve today with those ranks. Many of them will lose social status.

We believe that military registration should be conducted not just at the place of residence of citizens, but also at their work sites. Concentrating the registration at the place of residence alone, as proposed in the draft bill, will alter the structure and the functions of the military commissariats, redistribute budgetary allocations and, like any reform, result in a deterioration of the thoroughness and timeliness of the registration. Should we do that?

I believe that some of the norms should be removed from the law and turned into semi-legal enactments.

[Dokuchayev] The Supreme Soviet has the final say?

[Lata] Absolutely. More than 160 amendments were submitted by people's deputies along with the proposals made by the Ministry of Defense. We are hoping for a thoughtful and balanced approach to the bill on the part of the parliamentarians. We must all proceed from the main objective: to provide reliable protection for the homeland.

[Dokuchayev] Vasilii Filippovich, we know that alternative service is now a possibility. The Supreme Soviet is preparing for the first reading of a draft law on this.

[Lata] Under the Constitution of the Russian Federation (Article 45), every citizen whose convictions are in conflict with the performance of military service has the right to protect the homeland by performing alternative, civilian duties by the procedure established by the law.

The draft Law on Alternative Service specifies that alternative service is to be performed in one of the fields included on a special list at a state enterprise or establishment or in a state organization at the place of residence. It is proposed that these include the fields of timber management, construction, agriculture, education, health care and social security.

It is our opinion, in view of the fact that there are civilians in the armed forces covered by the Law on Defense, that they could be allowed to perform alternative service also in support subunits of the army and navy in positions which do not require the taking of the oath or the bearing or use of weapons.

In addition, we need to precisely define the procedure for verifying that a citizen has convictions in conflict with the performance of military service. Since such convictions are based on a rejection of violence, citizens who have committed violence in any form, violated the law, borne or used weapons and so forth, can hardly be categorized as having such convictions.

[Dokuchayev] Vasilii Filippovich, the citizens are undoubtedly concerned about the substance of and target dates for the passage of laws on the serviceman's status and on pensions for servicemen. They affect all defenders of the homeland.

[Lata] The Law on the Serviceman's Status is actually the military counterpart of the Code of Laws on Labor.

The nature of military service makes it necessary to restrict a number of rights of a serviceman as a citizen. The right to participate in political activities, for example, freedom of movement, the right to engage in business activities, the right to leave time and so forth. This is defined in the Law on the Serviceman's Status. Under it military personnel will also be granted special authority to use weapons within the procedure specified by the law. The document must also define the procedure for financial, housing, medical and transportation support for military personnel and their insurance protection.

We believe that the draft Law on the Serviceman's Status should be worked out as part of a single package together with the Law on Military Duty and Military Service and the Law on Alternative Service. And there should be no haste. These documents must actually secure the prestige of the military service for a long time to come in the situation of the socioeconomic reforms occurring in Russia.

Consideration of a draft law on pensions for servicemen could be postponed. We should first pass laws on military duty and military service and on the status of servicemen, and then work out the draft Law on Pensions for Citizens Discharged from the Military service, taking their provisions into account, and submit it at the next, 6th session. Until then we should be governed by existing Union laws and directives issued by the president of the Russian Federation on social protection for servicemen.

[Dokuchayev] In conclusion, tell us something about other bills.

[Lata] A second package of documents on defense could be made up of the Law on Mobilizational Readiness and the Law on Martial Law, the preparation of which has not yet been started but which have been included on the agenda of the Supreme Soviet. We are prepared to work out and submit our proposals on these bills as well.

The draft Law on the Defense Order and the Status of the Defense Enterprise are in the development stage in the parliament's Committee on Industry and Energy Resources (1 October 1992) but has not officially been coordinated with us. We believe that in view of the Supreme Soviet's passage of the Law on the Supplying of Products for State Needs, it would be expedient to work out just the draft Law on the Status of the Defense Enterprise. The area of defense orders is covered in the law already passed.

The draft Law on State Secrets has been coordinated but not yet worked out. It exists in extremely rudimentary

form written up by a working group of the Supreme Soviet's Committee on Defense and Security. There is also a version of a draft Law on State Secrets prepared in the Ministry of Security.

### **Discharged Service Personnel To Be Polled on Future Plans**

*PM2310092392 Moscow KRASNAYA ZVEZDA in Russian 16 Oct 92 p 1*

[Unattributed report: "Servicemen Being Discharged Asked To Fill Out Questionnaire"]

[Text] In accordance with the Russian Federation law on voluntary discharge from active military service for officer personnel after five years' service when they have completed their studies at a military educational establishment, a poll will be carried out in the Russian Armed Forces during October and November of officers, warrant officers, naval warrant officers, and servicemen on extended service who have made this decision.

The poll's aim is to create the appropriate data base at the Russian Federation Supreme Soviet Committee on Questions of Defense and Security in order to devise and implement social adaptation programs for those being discharged. What nationality would the discharged serviceman wish to adopt, where would he like to move to and settle permanently, is he being provided with housing—these and many other questions are included in the list of questions in the questionnaire.

## **CIS: GROUND TROOPS**

### **Col-Gen Mayev on Results of Ground Forces Inventory**

*93UM0024A Moscow KRASNAYA ZVEZDA in Russian 3 Oct 92 p 3*

[Interview with Colonel-General Sergey Aleksandrovich Mayev, ground forces deputy commander-in-chief for armament, by Ivan Sergeyev; place and date not given: "There Is Something for the Government to Think About as Well"]

[Text] *An inventory was conducted in the armed forces by a decision of the Russian minister of defense. Its results are now being analyzed in the General Staff. Colonel General S. Mayev, ground forces commander-in-chief for armament, explained some aspects of the inventory in his branch of the armed forces to our correspondent.*

### **Postscript to the Results of the Inventory in the Russian Ground Forces**

[Sergeyev] Sergey Aleksandrovich, what brought on an inventory of such large proportions?

[Mayev] As we know, Russia was one of the last of the former Soviet republics to begin establishing an army. By that time, much of the military equipment, armament and property of the armed forces had already been "privatized" by other sovereign states. A natural need arose to clarify precisely what Russia was left with.

[Sergeyev] And what did the inventory show, in the ground forces in particular?

[Mayev] The quantity of equipment and armament is fully sufficient to fulfill the missions facing the troops. But the quality leaves something to be desired. The proportion of obsolete models of equipment and armament is 70-75 percent of the total number. And this is understandable: The Russian Army has been established out of the internal districts of the former Soviet Army, which traditionally stored—and were armed with—old equipment.

This is one problem that needs to be solved. Another no less important problem in my estimation is that up to 40 percent of the repair enterprises also found themselves outside Russia. Thus, 80 percent of the armored equipment repair plants and 50 percent of automotive equipment repair plants were left behind in the Baltics, Belarus and Ukraine. Most of the radio and electronic equipment repair plants are also there as well. We are now reevaluating all repair plants remaining on Russian territory in order to be able to redistribute funds and respecialize some plants for the overhaul of equipment new to them.

[Sergeyev] It must be assumed that creation of additional repair capacities will require considerable outlays. Consequently, shouldn't the results and conclusions of the inventory commission also find their way to the Russian government?

[Mayev] Yes, the inventory revealed a number of such problems, which are beyond the ability of the armed forces alone to solve. A serious state program is required here. The inventory showed in particular that the ground forces are more than 30 percent understaffed. Mobilization resources are not being prepared. Unit-assigned reservists have not attended training since 1990. Enterprise directors are refusing to release their people for the training—the market, you know. Understandably, we cannot solve this problem without government intervention.

[Sergeyev] After what you have said, Sergey Aleksandrovich, the following question begs itself: How are things going as far as troop combat readiness is concerned?

[Mayev] It is generally very difficult to evaluate combat readiness. As in any other piece of machinery, there are strong sides and weak sides. There are districts in which combat readiness is higher, and there are ones in which it is lower. It is impossible to offer a categorical evaluation. But I feel that we have everything necessary to carry out our missions.

[Sergeyev] As we know, in the last two or three years some servicemen have gone into business for themselves. Were you able to discover any consequences of this activity in the course of the commission's work?

[Mayev] If you are referring to something negative, for example like major shortages of equipment or weapons, we were unable to find anything of this sort. Our task was

to compare the equipment and armament present with the tables of equipment and organization, and assess its quality. And that is what we did. And as for cases that could be of interest to the procuracy, we encountered none in our work. This is not because the commission worked poorly. As we know, long before the inventory began the Russian minister of defense turned attention to the feverish "commercial" activity of some officials, and it was prohibited altogether in some places, and put under regulation in others.

[Sergeyev] Still, Sergey Aleksandrovich, what do we make of the fact that while no shortages were discovered in the equipment and armament in the forces, there are more than enough weapons, ammunition, tanks and armored fighting vehicles in the hands of the opposing sides in the "hot spots"?

[Mayev] It is true that shortages as such were not revealed. The question here needs to be posed in another way: Have transfers of equipment and armament by the district commands to national military formations been legal or illegal? Commissions looked into this issue in the forces before we began our activity. Of course, cases of misappropriation of weapons and stealth of equipment were noted, and the procuracy is conducting investigations in their regard. But as I already said, this was before the inventory.

[Sergeyev] As I understand, you went on an inspection tour of the Far Eastern Military District. What were your personal impressions of the state of armament and equipment in the units in which you worked?

[Mayev] Yes, I worked on Kamchatka and Sakhalin. The first thing that catches your eye is, as I already said, the great shortage of personnel. This circumstance makes its impression upon the security, technical condition, repair and operation of armament and equipment. But on the whole, units and large units of the Far Eastern Military District are outfitted with sufficiently modern equipment and armament.

[Sergeyev] Which district elicits the greatest concern in this aspect?

[Mayev] Transbaykal. It has the largest proportion of obsolete types of armament and equipment.

[Sergeyev] What else did the commission reveal in the course of its work?

[Mayev] Overloading of depots and ammunition storage bases raises special concern. In the early 1980s a program was adopted to build new bases and arsenals for ammunition storage. The program was abandoned because of a shortage of finances. Consequently more and more consignments of ammunition and weapons are coming in from places far away and close to our borders, and from regions of conflicts, to bases and depots that are already stuffed to capacity. Depots and bases are now overloaded by a factor of 1.5-2. This creates a great danger of fire and explosions. Moreover it is becoming more difficult to prevent misappropriation of weapons

and ammunition from storage areas hastily set up near permanent storage facilities.

Things are going poorly with storage battery management. In the last three-four years industry has been manufacturing somewhere around 60 percent of the batteries the army needs. Consequently we have to double the battery operating time.

When units are disbanded, the people are discharged, but the equipment remains, and it must be kept in good shape. We are now thinking about how we are going to do this.

[Sergeyev] There is obviously equipment that is ready for the scrap heap. How are things going in terms of its salvage?

[Mayev] We have now accumulated literally mountains of old equipment and ammunition that is no longer usable. We have around 40,000 rail cars of just obsolete ammunition alone. But once again, the army cannot solve this problem alone. We need a special state program.

[Sergeyev] Can't you find anyone who wants to make some money off of the heaps of metal contained in the unneeded equipment and old ammunition?

[Mayev] We can find them all right. But what we get out of it won't be much at all. And the army is not so rich, after all, that it can give away metal costing many millions of rubles to commercial entities. A state approach is needed here. From my point of view, assets from salvaging old equipment should go primarily to the needs of the army.

[Sergeyev] Have any measures been implemented in regard to chiefs who have not displayed due concern for equipment and armament?

[Mayev] The chief of one of the equipment storage bases in the Volga Military District was dismissed from his position for shocking equipment storage conditions and poor work organization. The question of dismissing the chief of the storage base in the Far Eastern Military District from his position was raised for the same reason. Let me note that when you consider all of the objective difficulties I mentioned earlier, you find that in these cases many of the difficulties stem from the personnel themselves, which is why such steps were taken.

[Sergeyev] And finally, what was the main conclusion the commission reached upon summarizing the results of its work?

[Mayev] On the whole, as I said earlier, the ground forces are able to execute the missions assigned to them in terms of the presence and condition of armament and military equipment, and the materiel reserves. But as for the problems that require solution, we have already discussed those conclusions.



## CIS: AIR, AIR DEFENSE FORCES

### In Defense of MiG-29

93UM0039B Moscow KRYLYA RODINY in Russian  
No 6, 92 (signed to press 9 Apr 92) pp 13, 15

[Article by Oleg Terebov and Aleksandr Grinkin: "An Aircraft Named 'Rita'"]

[Text]

#### On a Visit...

The editors have received numerous letters from readers who directed attention to the fact that lately everyone who feels like it is attempting with all their might to downgrade the prestige of Soviet aviation. This concerned the MiG-29 in particular.

Well, this did not escape our attention. We will not enumerate such destructive articles. An impartial opinion must be given here, and it exists.

The American weekly TIME published an interesting article specifically about the MiG-29. By the way, it is not the first time there have been reports about it here. Previously it was said in a brief item that after the very first flights American testers recognized the MiG-29 as an "aircraft with great possibilities," and Secretary of the Air Force D. Rice declared that the MiG-29 concedes nothing to the best American fighters.

True, Rice expressed the opinion that the United States has a "certain superiority" in the area of avionics and fire control systems. They considered the insufficient engine life, determined to be 400 hours (this indicator is ten times higher for the Americans), to be a serious deficiency of the MiG-29.

The journal now reports that the MiG-29 was tested absolutely thoroughly in the Luftwaffe. These aircraft were delivered to the FRG from the GDR. And here are the pilots' accounts. The MiG-29 can turn "on a dime," withstand considerable g's (10 and 11; the limit is 9 for the best American fighters), and fire from various positions. The range of speeds extends from 160 km/hr to Mach 2.5 (this is at the level of the best western models).

Lieutenant Colonel Jürgen Kräft is responsible for the program for integrating the MiG-29 into the German Air Force. He says that two or three flights are sufficient to fall in love with this aircraft, which is powerful, easy to control and obedient. The aircraft can fly at an unusually high angle of attack, but the pilot does not lose control. This provides many advantages in air-to-air combat. For example, in pursuing the enemy and forcing him to execute a sharp turn, the MiG-29 can "nose up" to increase the kill zone.

Based on test results, the FRG Ministry of Defense decided to keep the MiG-29 as part of its Air Force. Now they are based at an air base 135 km southwest of Berlin, not far from the Polish border. All 23 aircraft (one other is in Fort Worth, Texas, where it is being tested by General Dynamics specialists) make up a separate

combat unit and its pilots wear a special sleeve insignia; 16 squadron pilots previously served in the GDR Air Force.

The journal quotes one of them, Major Gerd Kranl: "The main FRG Air Force fighter, the F-4 Phantom, would become easy prey for the MiG-29." This is not surprising, the journal notes, inasmuch as the F-4 is an aircraft of the 1960's. But practice battles showed that the MiG-29 clearly also concedes nothing to the latest American F-15 and F-16 fighters. Lieutenant Colonel Heinz Dengler frankly says that the outcome of the MiG-29's combat with them will depend on pilot expertise. Of course, the Eagle has more sophisticated electronics, and this gives it a substantial advantage outside of visual range, but in close combat the one who makes the first mistake loses.

The Americans showed no less enthusiasm for the MiG-29. "Fantastic" and "wonderful" was how Colonel Edward Meckenbeier [transliteration], an Air National Guard pilot and General Electric employee, evaluated it. He flew a combat trainer aircraft at an air show in Dayton, Ohio. He compared the flight with a trip in a Volkswagen, a beetle with a Cadillac engine.

It is true, the journal notes, that the aircraft is not outwardly pretty: drooping nose, cumbersome wing root extensions, gaping air intakes and uneven skin surface which seemingly was forged by smiths. The titanium surface is covered by rows of rivets and has irregularities as a result of careless machining. There are poorly closed seams and crudely cut hatches for access to internal systems. The overall impression of untidiness is reinforced by "homemade" wooden antenna housings and Pitot tube protectors resembling a garden hose.

But pilots love this aircraft. Kranl says the pilots call the MiG-29 "Rita," and she converses with them. ("Rita" is the name given to "verbal instruction," i.e., the audio system which gives a pilot instructions, replacing instruments and instruction manuals.)

With respect to the uneven skin, this is... an advantage! Messerschmitt engineers discovered that the skin helps increase lift by creating a boundary layer of air (the very same thing occurs, for example, with a golf ball because of dimples on the surface).

Many complex problems have been resolved simply in the aircraft design. Among them is the aiming device, which is no more cumbersome than a TV channel changer. In contrast to western systems, which still have not emerged from the experimental stage and which use massive helmets and exotic computers, a device costing \$50 has been installed in the MiG-29. It consists of a pair of infrared emitters simply attached to an ordinary helmet. Their beams are reflected from mirrors installed in the pilot cockpit. This permits measuring the angle of rotation of the pilot's head with surprising accuracy. The pilot can reorient the fire control system by 60° by looking at the target. Another feature of the aircraft is the so-called "panic button" on the control stick. It permits taking the aircraft out of a dangerous position quickly

and automatically if the pilot does not cope with control or if, as often happens, he loses his bearings (the main cause of air catastrophes). Until the MiG-29 arrived in the German Air Force, designers of the European fighter did not plan to equip their aircraft with such a button, but now they are taking another look at this matter.

Despite its outstanding performance, the MiG-29 burns a large quantity of fuel. But the principal weakness is the absence of modern electronics. Thus, western fighters are supplied with computerized fire control systems which permit the pilot to track five targets and select the most important ones. The Soviet approach is diametrically opposite: the computers are at the ground command post, from which fighters are controlled with the help of coded signals coming to the pilot cockpits. Therefore MiG-29 pilots often have to fly without taking their eyes off the instrument panel, from which they read instructions, instead of observing air space. The system's shortcoming showed up during the Persian Gulf war, when Iraqi ground command posts were destroyed by American aviation. Without them, Iraqi MiG-29's which dared take off proved helpless.

Nevertheless, German experts assume that the MiG-29 squadron can become an integral part of the NATO Air Force. It is easy to outfit the aircraft with Sidewinder missiles to supplement the powerful gun, which has a laser sight. If western communications equipment also is added, then during the 1990's the MiG-29 will be able to successfully perform the role of point-defense fighter.

This is why voices are being heard in Germany for purchasing new MiG-29's to replace the obsolete Phantoms. Manfred Opel, a retired Air Force general and now a Bundestag deputy from the Social Democratic Party, notes that the Phantom is "too noisy and too costly." There are fewer and fewer spare parts for it, and some have to be made almost by hand. Opel is demanding the purchase of 200 MiG-29's with aerial refuelling devices and their outfitting with western weapons. He assumes that each fighter, including the cost of spare parts and payment for technical assistance, will cost \$25 million, considerably less than similar American ones. This will allow Germany to have a reserve of time to decide whether or not it is to continue taking part in the costly EFA development program or meet its need for fighter aviation, which may still come in handy in the present restless world, by another method. This prospect, notes the journal, is driving western aircraft firms into a panic. Even now competition in the area of military aircraft trade is extremely stiff. What will happen if a very inexpensive commodity, the MiG-29, should appear on the market?

Oleg Terebov

#### And at Home

You see in the photo a far from commonplace episode at an airfield in Kalamazoo (USA): Valeriy Menitskiy, chief pilot of the Special Design Bureau imeni A. I. Mikoyan (left), and Terry Stinsen [transliteration], president of Hamilton Standard, have just returned from a

flight in a MiG-29UB. From the president's satisfied face, it is easy to determine how much he likes the Russian aircraft. The Americans even are not beyond purchasing several dozen "29's" for training flights.

Much already has been told about the MiG-29, but it can be added to, especially with regard to comments about alleged equipment shortcomings. Take the fire control system. It consists of three aiming channels connected by information and algorithmic coordination. The infrared sensor/thermal direction finder with laser rangefinding determines target coordinates with high accuracy and tracks them day and night. The system is connected with a helmet sighting device through an onboard computer. The onboard pulse-Doppler radar permits detecting a target against the background of the earth's surface independently of ground vectoring.

There is a tail protection radar warning the pilot of the danger of an attack from the rear. Automatic dispensers are installed in strakes ahead of the tail fins for ejecting thermal decoys and chaff. Three panoramic mirrors are located within the cockpit on the canopy framing for convenience in observing the rear hemisphere. The combat trainer has a periscope with large viewing screen.

Now information of interest to model builders. Standard MiG-29 painting is silver-blue, fairing dark blue, mat black between canopy and fairing, tail fin tips blue, nozzles mat black. The front fighter usually is painted light gray-blue on top with separate gray-green spots, fairing gray, from canopy to nose fairing dark gray, and the nozzles are the very same color. But there are as many anomalies in painting as you like: in combat regiments of other countries where our Mig's are being delivered, they are being painted to their own taste and in their own manner with the most exotic color combinations.

This issue has a report on the MAPO [not further identified] imeni P. V. Dementyev, which makes the MAI-890 Aviatika. This is excellent work, but the MiG-29 also is a product of highest quality. But over 50 of very new aircraft have accumulated in plant spaces. The military department refused to buy its own order. Similar refusals have arrived from countries of the former Warsaw Pact and from Afghanistan... This is the very time to take advantage of the U.S. Air Force's desire to purchase even an entire regiment of MiG-29's for training purposes. But alas... What is MAPO to do until the Aviatika aircraft come to replace the fighters? The answer is not simple, but one has to think and solve the problem in a practical way.

Aleksandr Grinkin

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#### Comparison of U.S., Soviet Bombers

93UM0039A Moscow KRYLYA RODINY in Russian  
No 6, 92 (signed to press 9 Apr 92) pp c2, 1-3

[Conclusion of article begun in KRYLYA RODINY No 5, 1992 by Vladimir Ilin: "What Awaits You, Long-Range Aviation?"]

[Text] The Tu-160 is the largest of all bombers previously created either in the USSR or abroad. Maximum takeoff weight is 275 tonnes. It is made in a normal aerodynamic configuration with a variable-geometry wing which interfaces smoothly with the fuselage thanks to the presence of developed leading-edge extensions and forms an integral center section. Maximum wing sweep is 65°. The aircraft is fitted with an in-flight refueling system.

NK-32 augmented turbofan engines (4x25,000 kg(f)) are installed in two twin nacelles beneath the fixed section of the wing, giving the bomber a high thrust-to-weight ratio for aircraft of that class of 0.36 (this value is 0.25 for the B-1B aircraft, which is close to the Tu-160). Maximum rate of climb is 60-70 m/sec, which is more inherent to a fighter than a strategic bomber.

Thanks to powerful high-lift devices (trailing-edge flaps across the entire span, leading-edge flaps, and spoilers), the aircraft has good airfield performance (landing speed 260-280 km/hr with a landing weight of 140-166 tonnes; unstick speed 270 km/hr with a weight of 150 tonnes and 370 km/hr with 275 tonnes; takeoff run depending on weight 900-2,200 m; landing run 1,200-1,600 m).

The aircraft fin is all-moving (the M-50 bomber fin also had a similar design) and the horizontal tail surface installed at the base of the fin also is all-moving.

Armament for engaging targets with previously known coordinates, consisting of up to 12 long-range cruise missiles or up to 24 lesser range missiles, is accommodated on rotary launchers in two long bomb bays. The combat payload weighs 22.4 tonnes and the maximum permissible combat payload is 45 tonnes. In the future the aircraft also will be equipped with non-nuclear armament, including precision weapons.

Electro-optical and radar sensors, EW systems and numerous pods with decoys installed in the tail cone provide protection for the Tu-160.

The crew of four is disposed in two cockpits with K-36 ejection seats. Cockpit instrumentation is rather "conservative" for a bomber built in the early 1990's, and is represented by conventional electromechanical indicators with circular dials. In addition, each pilot has a CRT data display. Operator workstations are equipped with several CRT displays both with circular as well as rectangular screens. Rejecting use of a "glass cockpit" (i.e., a cockpit whose entire presentation is taken to electronic displays, as is done in the Northrop B-2) in the stage of creating this aircraft is fully justified when we recall the difficulties accompanying introduction of electronic display in our Il-96 and Tu-204 liners. The Tu-160 is the first Soviet bomber controlled not by a control wheel, but by a fighter-type control stick.

The aircraft's in-flight comfort has been increased, as the duration of a flight may reach 15 hours without aerial refuelling. There is a toilet, electric stove and folding

sleeping place for resting. At the same time, the aircraft lacks a built-in ladder, as is found in the B-2 and B-1B bombers, for example.

The American Rockwell B-1B aircraft is closest to the Tu-160 in design. Work under the AMSA low-altitude strategic bomber program began in the United States in 1966. The first flight of the B-1A experimental aircraft took place in October 1974. Four aircraft were built with a maximum takeoff weight of 179,170 kg, empty weight 78,020 kg, maximum speed 2,200 km/hr, maximum range 9,600 km.

The B-1A program was halted in 1977 for political and financial considerations, but was renewed in 1981. The new B-1B aircraft differed from the initial one by a reduced radar cross section (through wide use of elements of Stealth technology) and was viewed as a temporary step until the appearance of the more sophisticated Northrop B-2 bomber. Two B-1A's were modified to the B-1B variant. The modified aircraft took off for the first time in 1983, and the first flight of a series B-1B took place the following year. Soon series production began, ending in 1988. One hundred bombers were built, three of which were lost as a result of accidents.

A strengthening of demands for reducing the radar signature led to rejection of variable-geometry intakes and a decrease in maximum flight speed from 2,200 to 1,400 km/hr, i.e., the aircraft essentially ceased to be supersonic. At the same time, radar cross section, the aircraft's main characteristic of "detectability," was reduced tenfold and was 3 m<sup>2</sup> in the nose sector. It is difficult to compare the degree of radar signature of the Tu-160 and B-1B, but certain conclusions still can be drawn.

Obviously the B-1B is considerably obligated for the decrease in its radar signature to use of a fixed-geometry intake with S-shaped partition with a radar-absorbing coating, which shields the engine compressor from direct exposure from ahead. But a variable-geometry intake is used on the Tu-160. The compressor of the NK-32 afterburning turbofan can be seen excellently through it.

A more advanced shape of the Tu-160 airframe as well as lesser height of fuselage in the cockpit area provide certain advantages in reducing signature, since it is situated ahead of the nose wheel well (the B-1B cockpit is above the landing gear).

The Tu-160 can be used not only as a bomber, but also as a unique first stage for inserting satellites into space. It is proposed to suspend under the fuselage the Burlak winged booster rocket (see KRYLYA RODINY, No 1, 92), capable of inserting a satellite weighing 300-500 kg into polar orbits 500-700 km high.

The appearance of a new class of aircraft armament—small cruise missiles—gave a second life to the strategic aviation "veterans" Boeing B-52 and Tu-95 aircraft. In response to refitting of Stratofortresses with ALCM missiles, a Tu-95MS cruise missile platform outfitted with improved equipment became operational in the



USSR in 1981. The aircraft is intended for engaging important fixed targets with air-launched cruise missiles day or night in any weather conditions and at any point on the globe. Six cruise missiles are accommodated on a rotary launcher in the Tu-95MS fuselage. The aircraft's defensive armament is an EW system and two GSh-23 twin-barrel cannon in a rear mount.

U.S. strategic aviation numbers 574 B-1B and B-52 bombers carrying 2,353 nuclear weapons. This is enormous power whose relative importance will grow constantly as a result of upgrading of the strategic aviation fleet and its outfitting with new precision weapons.

In addition to long-range bombers, Long-Range Aviation in our country has bombers in the inventory intended for operations within continental limits. The Tu-4, a Soviet copy of the American B-29, was the first postwar aircraft of this class. The Tu-16 bomber became operational in 1952. The aircraft is armed with various types of air-to-surface missiles permitting engagement both of fixed as well as mobile targets. It is equipped with EW assets supporting passive and active jamming in a wide range of frequencies. The Tu-16 is capable of operating from dirt airfields.

The USSR's first series supersonic long-range bomber, the Tu-22, became operational in 1962. Like the Tu-16, this graceful aircraft with crew of three is outfitted with bomb and missile armament. The missile version, Tu-22K, carries one missile accommodated in a semi-recessed position beneath the fuselage. Missiles are employed with active radar guidance. They are for engaging targets clearly distinguishable on radar. The missiles have autonomous control in range and heading and passive direction-finding homing.

Created on the basis of the bomber was the Tu-22R, an electronic intelligence, radar reconnaissance, and visual reconnaissance aircraft (see KRYLYA RODINY, No 5, 91) which also can be used for aerial photoreconnaissance and topographic aerial photography in the operational depth at speeds up to 1,700 km/hr, and also the Tu-22P, intended for active and passive jamming in metric, centimetric and decimetric radar wavebands. It can identify airborne targets, vector fighters, and give target designations to ground air defense weapons.

The defensive armament consists of a tail unit with R-23 (23 mm) gun and EW assets.

Work began on a competitive basis in 1962 in the P. O. Sukhoy, A. N. Tupolev and A. S. Yakovlev special design

bureaus to create a new-generation long-range bomber. The aircraft was intended for delivering weapons with high ( $Mach > 3$ ) supersonic speed to long range without aerial refuelling. The possibility of basing on dirt airfields was allowed. The "100" design created in Sukhoy's Special Design Bureau was acknowledged as the most successful. This aircraft, denoted the T-4, made its first flight in 1973 (see KRYLYA RODINY No 2, 91). It should be added to what has been published that the forward fuselage ahead of the pilots' cockpit was made to deflect downward to improve the view during takeoff and landing. The aircraft was outfitted with an analogue electroremote control system with quadruple redundancy, astroinertial system, high-power radar, and reconnaissance equipment. It included a side-looking radar and optical, infrared and electronic intelligence sensors. The cockpit accommodated a navigation plotting board and multifunctional control consoles. The armament included two high-speed solid-propellant air-to-surface guided missiles accommodated on two underwing pylons.

The Tu-22M (widely known in the West by the name "Backfire"), conceived as a modification of the Tu-22, was created in the early 1970's, but work under the program led to creation of essentially a new aircraft. The Tu-22M is the first Soviet bomber with a variable-geometry wing.

The first modification had a pod with brake chute in the tail section beneath the tail fin.

Two GSh-23 twin-barrel guns appeared in the tail section and the air intake design was somewhat altered in the Tu-22M2 modification.

The Tu-22M3 with an intake resembling the design of the MiG-25 and altered defensive armament of one modernized GSh-23 gun (the barrel unit is disposed in the vertical plane) with a rate of fire of 4,000 rounds/min became operational in 1981. The aircraft was outfitted with the KT-1 survival system, supporting automated abandoning by the crew of four in a certain sequence.

The Tu-22M3 bomber can carry guided missiles (semi-recessed beneath the fuselage and on underwing pylons). The weight of bomb armament accommodated in the cargo cabin and on four hardpoints (two beneath the wing and two beneath the fuselage) can reach tens of tonnes.

Long-Range Aviation is a deterrent strategic factor always and everywhere, and rejecting it and RDT&E means reducing the level of national security.

Characteristics of USSR and U.S. Strategic Bombers

	Tu-95MS	Tu-160	B-1B	B-52H
Wingspan, m*	50.05	55.7/35.6	41.7/23.8	56.39
Aircraft length, m	43.13	54.1	44.8	49.05
Aircraft height, m	13.301	13.1	10.4	12.40
Maximum takeoff weight, kg	185,000	275,000	216,360**	221,350
Maximum speed:				

Characteristics of USSR and U.S. Strategic Bombers (Continued)

	Tu-95MS	Tu-160	B-1B	B-52H
km/hr		2,200	1,270	960
Mach	0.82	2.0	1.2	
Maximum flight range without aerial refuelling, km	11,000	12,300	10,400***	16,090****
Length of landing run, m		900-2,200		2,900
Length of takeoff run, m		1,200-1,600		

\*Minimum and maximum wingspan is indicated for aircraft with variable-geometry wing.

\*\*Maximum design weight. Essentially the maximum takeoff weight is not over 201,900 kg.

\*\*\*Combat payload is 8 guided missiles and 8 B61 nuclear bombs with an overall weight of 10,900 kg. An additional fuel tank for 9,000 kg of fuel is installed in the aft bomb bay.

\*\*\*\*Obviously the range with reduced makeup of armament or without armament.

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**Performance, Specifications Of YAK-141 V/STOL**  
*92UM1518A Moscow KRASNAYA ZVEZDA in Russian*  
29 Sep 92 p 2

[Article by Sergey Prokopenko: "The YAK-141: A Brief Flight Ahead of Its Time"]

[Text] "At the 38th International Air and Space Show in Le Bourget, the demonstration of a model and showing of a film about this aircraft caused a sensation. The appearance of the YAK-141 shook the West, whose efforts to develop a supersonic vertical takeoff and landing aircraft proved to have been surpassed," wrote the British magazine FLIGHT INTERNATIONAL.

The YAK-141 is a logical continuation of the A.S. Yakovlev Experimental Design Bureau's efforts to develop vertical takeoff and landing aircraft. The plane was the world's first among aircraft of this class to exceed the speed of sound.

The YAK-141 is a multipurpose vertical takeoff and landing aircraft designed to intercept airborne targets and to engage in close-range combat, as well as to carry out strikes against ground and water-surface targets.

It is the world's first aircraft that combines the features of a supersonic fighter and a vertical takeoff aircraft. While designed to perform missions typical of aircraft that take off in the usual way, the YAK-141 nevertheless has a series of advantages over them. It has the capability to take off without taxiing onto an airport runway, but from a short taxiway leading directly from its hangar. This makes possible the massed takeoff and combat engagement of YAK-141 subunits as soon as the scramble signal is received. The aircraft can also be operated from damaged airfields. The aircraft's special features make it possible to disperse the planes over a large number of compact sites, thereby ensuring enhanced survivability and concealed basing.

The YAK-141 can be used to create a flexible, mobile and highly survivable defensive system that can ensure

preservation of the defending side's combat potential in the event of a sudden massive strike by the enemy.

The power-plant includes two RD-41 lift engines and one R-79 vectored-thrust engine, which allow the aircraft to take off and land in afterburner mode. The aircraft's maximum takeoff weight is nearly 20 tonnes. Its maximum speed is 1,850 km per hour, and it can carry a maximum combat payload on its external stores of 2.6 tonnes. Its flight range on vertical takeoff is 1,400 km; when the aircraft takes off from a short run and carries an external fuel tank its range can reach 2,100 km.

The YAK-141's piloting and navigation system allows both manual and automatic control of the aircraft from takeoff to landing, at any time of day, in diverse weather conditions, and at all geographical latitudes. Flight tests showed that the aircraft can be based on ships or be operated from short reinforced-concrete runways—and eventually from paved runways. The armament control system includes a multiregime radar with integrated detection and identification and allows the aircraft to carry out missions using different types of weapons.

The armament consists of a 30-mm gun, guided missiles, and unguided missiles mounted to the aircraft exterior.

That the YAK-141 possesses superior flight performance specifications is also evidenced by the fact that during the test-flight process, test pilot Andrey Sinitsyn, in one of the experimental aircraft, set 12 world records for climbing speed and maximum flight altitude with a payload of one tonne and two tonnes. In the opinion of foreign aviation specialists, the YAK-141 is 15 to 20 years ahead of similar foreign-made models.

The team of designers has identified basic ways in which the YAK-141 will be modernized. They include improving its flight performance specifications by increasing the thrust of the vectored-thrust engine; increasing the maximum fuel reserve; and refining the aircraft's design. Plans call for enhancing its combat effectiveness by expanding the mix of weapons and weapon control systems. Efforts are under way to reduce the aircraft's vulnerability to radar detection.

To sum up, it can be said that the A.S. Yakovlev Experimental Design Bureau has developed an aircraft ahead of its time. Unfortunately, however, on account of financial difficulties, it is not yet possible to put the

YAK-141 into series production. One hopes that the Russian Navy will nevertheless soon place this highly promising and unique aircraft in service.

#### Basic Flight Performance Specifications

##### Maximum flight speed, kmph:

—low altitude 1,250

—at altitude of 11 km 1,800

Operating ceiling, km 15.0

##### Operating flight range on vertical takeoff without load, km

—low altitude 650

—at altitude of 10-12 km 1,400

##### Operating flight range with 120-m run and 1-tonne load, km:

—low altitude 1,010

—at altitude of 10-12 km 2,100

##### Combat operating radius with 120-m run and 2-tonne load, km

698

##### Loiter time at 100-km distance, minutes

90

##### Maximum payload weight, kg:

—on vertical takeoff 1,000

—with short run (120 m) 2,600

##### Takeoff weight, kg:

—on vertical takeoff 15,800

—with short 120-m run 19,500

##### Maximum fuel reserve, kg

—in internal tanks 4,400

—in exterior tank 1,750

##### Maximum operating overload with 50 percent fuel reserve, g

7

#### Performance, Specifications of Tu-22M

93UM0035A Moscow KRASNAYA ZVEZDA in Russian 9 Oct 92 p 2

[Article by Valentin Rudenko, KRASNAYA ZVEZDA, under rubric "Arsenal": "Tu-22M3: Long-Range Missile-Armed Bomber"]

[Text] As we know, many domestic combat aircraft and helicopters were created as a counterbalance to particular western aircraft. The Tu-22M3 has no analogues abroad. This aircraft system holds a middle position between strategic and front missile-armed bombers and is intended for engaging ground and naval targets with supersonic air-to-surface missiles and aircraft bombs day and night, in VFR and IFR weather.

The Tu-22M3 was developed at the ANTK [not further expanded] imeni A. N. Tupolev (by the way, in these days the firm is celebrating its 70-th jubilee) by a group of designers headed by Dmitriy Sergeyevich Markov. Initially it was conceived as a thoroughly modernized version of the Tu-22 missile-armed bomber already in

the inventory, but the result was the appearance of an aircraft differing fundamentally from the Tu-22: variable-geometry wing, considerably higher combat and performance characteristics. In the West it was given the name "Backfire" and was categorized as strategic by some military specialists. Only after lengthy and difficult negotiations did our foreign opponents agree that the Tu-22M3 cannot be considered strategic, if only, for example, because it is not equipped with an aerial refuelling system, and without refuelling it is incapable of making intercontinental flights.

It made its maiden flight in 1969 and became operational in 1976. It was taught to fly by honored test pilots Vasiliy Borisov, Anatoliy Bessonov and Boris Veremey. The Tu-22M3 now being produced has powerful engines. Two NK-25 turbofans with afterburner and maximum takeoff thrust of 25,000 kg(f) each, developed in the N. D. Kuznetsov Special Design Bureau.

The Tu-22M3 is the main missile-armed bomber of the Russian Air Force if, of course, strategic aircraft are not taken into account. It found wide use in Naval Aviation.

The Tu-22M3 is a very effective multipurpose aircraft system. In the regular version it carries aboard 3,000 kg of aircraft bombs and one air-to-surface missile. The aircraft's maximum bomb load is 24,000 kg (or three cruise missiles).

Depending on the assigned mission, the Tu-22M3 can be used both with a mixed suspension of bombs and missiles as well as in the version of pure missile-armed aircraft or bomber. The basic combat load is accommodated in a special bay within the fuselage and on four bomb racks beneath the aircraft wing. The aircraft carries bombs of up to 500 kg under the wing and up to 3,000 kg in the bay. The missile-bomb load can be a combination, such as bombs in the bay and missiles under the wing and vice versa. In addition, a 23-mm twin-barrel aircraft cannon controlled by the navigator-operator is installed in the aircraft's tail section.

The Tu-22M3 has good airfield and acceleration performance and is capable of making a flight and conducting combat operations in a wide range of altitudes and speeds.

The Tu-22M3 has a crew of four: aircraft commander, assistant aircraft commander (copilot), and two navigators—an operator and a navigator. The aircraft is equipped with KT-1 ejection seats. Ejection can be both forced as well as individual, where each crew member abandons the aircraft independently and at different times.

Already over 20 years have passed since the first takeoff of the missile-armed aircraft, but work to upgrade its flying and combat performance characteristics has not stopped.

"The aircraft has a number of unique features and great potential capabilities, which permits using it not just for military purposes," says Boris Levanovich, in the recent past deputy chief designer of the Tu-22M3. "Now, for

example, work is being done through efforts of the ANTK imeni A. N. Tupolev, the Central Aero-Hydrodynamics Institute, and the Flight Research Institute imeni M. M. Gromov to conduct a series of interesting tests in a flying laboratory created on the basis of the missile-armed aircraft."

This year the Tu-22M3 was openly displayed for the first time at the domestic Mosaeroshou-92 aerospace show and the Farnborough (UK) international air show, where it received a high assessment from specialists and the press. There was not one publication covering the work of the air show which did not deem it necessary to place a photograph of the Tu-22M3 on the front page and tell the readers about the Russian missile-armed bomber in detail. By the way, the Tu-22M3 flew from Moscow to London without landing and refuelling: the "dalnik" [long-range aircraft], as they say, is capable of such distances.

#### Principal Tu-22M3 Performance Characteristics:

Aircraft length	42.46 m
Height	11.05 m
Leading edge sweep of swinging part of wing	20°, 30°, 65°
Wingspan with X=20°/65°	34.28 m/23.3 m
Maximum takeoff weight	124,000 kg
Maximum landing weight	88,000 kg
Cruising speed	900 km/hr
Maximum flight speed	2,000 km/hr
Combat radius	2,200 km
Service ceiling	13,300 m
Takeoff speed	370 km/hr
Takeoff run	2,000-2,100 m
Landing speed	285 km/hr
Landing run	1,200-1,300 m

### CIS: NAVAL FORCES

#### Rear Adm Aleksin Notes Naval Accident Rate for 1st Half of 1992

93UM0062B Moscow KRSNAYA ZVEZDA  
in Russian 14 Oct 92 p 3

[Article by Aleksandr Pilipchuk: "Chief Navigation Officer: The Accident Rate for Ships Is Dropping"]

[Text] During the first half of 1992 there were five serious accidents or disasters involving ships and extensive human casualties in the Navy. These data were published in a number of press organs. At our request Rear Admiral Valeriy Aleksin, chief navigation officer of the Russian Navy, comments on them;

"This information is not consistent with the reality. These are the incidents registered for the period between January and May: a fire on the large ASW ship Admiral Zakharov, in which PO 2nd Rank V. Andruk died, and

an explosion of the electrolyte expansion tank of a compressor on a SSN of the Northern Fleet, in which Capt 1st Rank K. Lyashkov was killed. Reports of an explosion of a solid-fuel missile on a Typhoon-class SSN, a fire on the nuclear-powered missile cruiser Admiral Lazarev (the former Frunze), the flooding of a compartment on one of the large ASW ships, and all the more any casualties resulting from them, are based on groundless rumors."

The Navy's chief navigation officer went on to say that between 1987 and 1992 the rate of various kinds of accidents in the Navy dropped three- to six-fold from the previous five-year period. Incidentally, the accident rate in our country's transportation system and industry rose five- to seven-fold during the past six months.

One can only add to what the admiral said the fact that the campaign against accidents is being waged against a background of drastic deterioration of the fleet's materials and equipment base and its repair facilities.

#### Italian Chief of Staff Visits Northern Fleet

PM0710101592 Moscow KRSNAYA ZVEZDA  
in Russian 2 Oct 92 p 3

[Reports by Captain 2d Class Vladimir Gundarov and Lieutenant Colonel Sergey Porokhov: "Visitors From Italy"]

[Text] General Domenico Corcione, Italian armed forces chief of general staff, is on an official visit to Russia. Yesterday he visited the Northern Fleet's main base—Severomorsk.

General D. Corcione and those accompanying him were greeted at the airfield by Admiral Oleg Yerofeyev, commander of the Northern Fleet.

The visitors went onto the nuclear-powered attack submarine commanded by Captain 2d Class Valeriy Agafonov and the heavy guided missile cruiser Admiral Nakhimov.

On the same day the visitors flew to St. Petersburg. [Gundarov report ends]

D. Corcione and those accompanying him arrived in St. Petersburg. The visitors were greeted at Pulkovo airport by Colonel General Sergey Seleznev, commander of the Leningrad Military District forces.

The visitors will be in St. Petersburg until 3 October.

#### Performance, Specifications of 'Bditelnyy' (Krivak) Frigate

93UM0017A Moscow KRSNAYA ZVEZDA in Russian  
6 Oct 92 p 2

[Article by Vasilii Fatigarov: "For the Protection of Formations and Convoys"]

[Text] The Soviet Navy became an ocean-going nuclear missile navy in the 1960s. Formations of surface ships and submarines held alert duty in different regions. Naturally they required the support of modern patrol

ships, and escort of convoys in regions of local armed conflicts required special escort ships.

The job of designing a ship with a relatively small displacement capable of carrying out a wide range of such missions was assigned to a collective headed by Professor V. Yukhnin. Nikolay Pavlovich Sobolev became the project's chief designer.

Initially the ship was defined as a classification 2 large ASW ship, but soon after, the classification was changed, and it became a patrol escort (designation SKR). With some stretch of the facts it may be considered to be an analog of the American ASW frigate, although the functions of an SKR are considerably broader. A ship of this class carries out the missions of protecting transport convoys and warship formations, and it can provide fire support to an assault landing and operate against enemy submarines.

The patrol escorts were built in Leningrad, Kaliningrad and Kerch. The first hull was accepted into the navy in 1971, and was named the *Bditelnyy*, while the last, commissioned in 1982, was proclaimed the *Poryvistyy*. Several similar ships were transferred to seagoing units of the border troops with a PSKR classification, meaning border guard patrol ship. They are protecting Russia's Pacific Ocean borders. A total of 32 patrol ships of this design were built for the navy; modifications differ in artillery armament and the missile system (several carry an attack missile system in place of an ASW system). Two of the patrol ships have already been scrapped—fleeting is the time of ships. But this does not mean that all others have become obsolete as well. In regard to many indicators, including their constant readiness for sea and their unsinkability (under the most unfavorable convergence of circumstances—the flooding of any two adjacent compartments totaling 20 percent of the ship's length), they remain among the best ships of the Russian Navy.

#### Specifications and Performance Characteristics of the *Bditelnyy* Class Patrol Ship

1. Displacement:
  - standard—around 2,800 tons
  - total—around 3,200 tons
2. Measurements (in meters)
  - greatest length—around 125
  - greatest width—around 14
  - average draft—around 4
3. Speed
  - full—around 30 knots
  - endurance—around 18 knots
4. Cruising range at endurance speed—around 4,500 nautical miles (around 8,100 km)
5. Endurance with respect to provisions—30 days
6. Crew
  - total complement—192
  - officers—22

7. Main propulsion unit—gas turbine, twin shaft  
total power—around 56,000 horsepower

#### 8. Armament:

##### a) antisubmarine:

- four cruise missiles in a launcher;
- two quad tube 533-mm torpedo launchers;
- two 12-barrel rocket-propelled depth charge launchers.

##### b) air defense:

- 40 missiles in two surface-to-air defensive missile systems (used against low-flying airborne and marine targets);
- two twin unstabilized launchers;
- two twin 76.2-mm (2 one-gun 100-mm in some modifications) turret mounts.

##### c) electronics:

- reconnaissance and active jamming station;
- four passive jamming units;
- three outfits of corner reflectors;
- radar station for detection of airborne and marine surface targets;
- identification and communications radar station.

##### d) sonar:

- sonar station;
- sonar station with towed antenna;
- two submarine wake detecting stations.

A Ka-25 helicopter landing area is foreseen in place of one of the artillery mounts on the ship's border modification.

#### U.S.-Russian Naval Cooperation in Gulf

93UM0021A Moscow KRSNAYA ZVEZDA in Russian  
7 Oct 92 p 3

[Article by KRSNAYA ZVEZDA correspondent Aleksandr Pilipchuk: "Russian Ships May Use Weapons in Self-Defense"]

[Text] KRSNAYA ZVEZDA (No. 209) has already reported that the large ASW ship Admiral Vinogradov and the tanker Boris Butoma will take part in the international naval blockade of Iraq set up in accordance with a UN decision. Captain 1st Rank Valeriy Novikov, chief of the Russian Navy's press service, made the following statement:

"The Admiral Vinogradov and the Boris Butoma have already arrived at their stations. An American ship will join them with an American Naval officer aboard authorized to brief Captain 2nd Rank Mikhail Abramov, commander of the expedition, on the situation in the Gulf and on safe sailing routes. Mikhail Abramov is to take part in a meeting of the tactical groups of national naval forces of the USA, England and France to discuss matters of coordination.



Valeriy Novikov underscored the fact that it is not now planned to build up the Russian forces in the Gulf, just as it not planned for the ASW ship to take part in combat operations. The ship's commander is authorized to use the weapons for self-defense at his own discretion, however.

## CIS: REAR SERVICES, SUPPORT ISSUES

### Head of State Commission on Orbital Testing Interviewed

93UM0026A Moscow KRASNAYA ZVEZDA in Russian  
2 Oct 92 pp 1-2

[Interview with Colonel-General Vladimir Leontyevich Ivanov, doctor of technical sciences, head of the State Commission on Flight Tests and the Mir orbital station, by Colonel Valeriy Baberdin, KRASNAYA ZVEZDA correspondent, under the rubric "Interviewee of the Day": "From the First Sputnik and Beyond..."]

[Text]

#### Calling Card

He was born in 1936 in the city of Kamenka-Dnepropetrovskaya in Zaporozhye Oblast. He completed the Caspian Higher Naval School imeni S.M. Kirov in 1958 and the Military Academy imeni F.E. Dzerzhinskiy in 1971. He was involved with space equipment and rockets from the very beginning of his career as an officer. He went through all the stages, from crew chief to deputy commander of a missile army. From 1979 to 1984 he served as chief of the Plesetsk space launch facility. In 1989 he was appointed chief of space units of the Ministry of Defense in what was still the USSR at that time. He heads the State Commission for Flight Tests and the Mir orbital station. He is a doctor of technical sciences and a colonel general.

[Baberdin] Vladimir Leontyevich, does it not seem sad to you that precisely now, in the Space Year declared by the UN, on the eve of the 35th anniversary of our nation's launching of the first artificial earth satellite, we have to begin the interview by asking whether we need space flights at all. I have to ask it, however, because there is a lot of discussion about it. And in diverse groups at that: among scientists, political figures, statesmen and social activists. Some of them complain about the buildup of the effort in this field, others severely criticize our space programs and still others insist that we curtail individual areas of the space research.

[Ivanov] Of course, it is sad. We are incapable of maintaining our priorities and have forgotten how to take real pride in them. The launching of the first satellite and Yuriy Gagarin's flight were events signaling man's transition to a new level in his development. We opened up the space age.

And you know, not much mention was made of this at the World Space Congress in Washington, which I

recently attended. On the other hand, American achievements were described so attractively, with such enthusiasm, such national pride: the astronauts' flights to the moon, the Shuttle program, the program for the future Freedom orbital station. We could learn something from them.

Another thing. The congress was attended by representatives of almost all the world's states. I was surprised to learn that national space agencies have already been established even in the nations of Central Africa. Not to speak of the space plans of the European states, Japan, China, India and Indonesia.

Incidentally, great interest was shown in our delegation at the congress. We had no shortage of proposals for long-term joint projects. As you know, it is planned for an American astronaut to fly with our crew to the Mir and for a Russian cosmonaut to fly on the Shuttle. This event is tentatively set for 1994. We already know the names of those who will fly to America's training center from our Cosmonaut Detachment: Vladimir Titov and Sergey Krikalev.

The American astronaut—it will most likely be a biologist/physician—will spend something on the order of three months on Mir. The Shuttle will then approach the station and dock with it. This is a unique operation involving 100-ton vehicles. Many countries are showing great interest in our delivery vehicles. That is not surprising. No others have such a wide range of power.

And so, I am convinced that space exploration is in need of neither justification nor defense. There is an objective need to continue its development. One can dispute only individual trends and specific focuses.

The fact that in the past we did not give much thought to the real return from space technology and to its commercial aspect is another matter. The American experts, on the other hand, have learned how to earn 4 dollars in profits from every dollar invested in the space industry. I can say that we were not strapped for funds. The main thing was to move ahead. The situation has now changed. Incidentally, you attended a board meeting of the Russian Space Agency and saw how passionately and substantively they discussed the distribution of the budget among various space programs to the year 2000. And it will have to be defended also in the government and the parliament.

[Baberdin] Yes, among other things, they discussed some new things: direct accounting between the industry and the Russian Ministry of Defense, the development of dual-purpose spacecraft under military programs.

[Ivanov] Precisely so. I even want to mention the term I used in my address. We need to accomplish our space missions by the "dual traction" method. These are words uttered by the President of Russia during a visit to Plesetsk. His idea amounted to the following. We have a Russian Ministry of Defense and a space agency. Let us harness them together, have them share the budget and jointly carry out all of the space missions. And this would

be the right thing to do, since all of our launchings, technical sites and spacecraft have a dual purpose.

Take intelligence-gathering satellites, for example. They can be used successfully for remote examination of the earth and for ecological monitoring. Without detriment to their basic mission. And the GLONASS global navigational satellite system can easily service all interested seagoing organizations. In addition we could make it available to geodists and experts in earth physics. All of this would mean hundreds of millions, even billions, of dollars in annual profits. I repeat, I am speaking only of military space facilities.

Take our command and control complexes and our Main Center for Control and Testing of Spacecraft. From the very start these units were set up as conversion units. We have not and do not today separate military and civilian missions: the same personnel, the same crews, the same technical facilities, the same demandingness and the same responsibility.

[Baberdin] Vladimir Leontyevich, I have recently visited space companies and talked with the industrialists fairly frequently. Orders are being cut for the plants, production is being curtailed, and superb specialists are leaving. This has to affect the quality and reliability of the missile and space systems, does it not?

[Ivanov] Unquestionably, and we are very concerned about this. Even now, when manned spacecraft are being readied for launching, complaints in the industry have increased considerably. And this is despite the fact that we are managing to retain most of the specialists for now. They are a source of pride for us. For many of our people space means everything. If they leave, we shall have lost a lot.

With respect to our scientific research and experimental design work, we are pursuing them in a planned manner, with adjustments for our financial capabilities. Naturally, we take into account the fact that the likelihood of a nuclear war has been greatly reduced, that we have abandoned direct confrontation with America and that danger spots have developed around Russia, within the CIS.

We must have the satellites and ground facilities with which to reduce several-fold the amount of time needed to deliver information. We need more accurate navigational measurements. Our satellites are still heavy and have an orbital life expectancy of less than 5 years. This is clearly too little. Our ground equipment is becoming obsolete, and we must update our pool of delivery vehicles.

[Baberdin] Right now the space units are a part of Russia's armed forces. Because of their specific nature, however, they are scattered throughout the territory of the CIS. Some of them are now located near but outside our borders.

[Ivanov] As of today our units are deployed on the territories of five states. To move the units would involve unique equipment difficult to remove. They

were formed over a period of decades, and special sites were selected for their deployment.

We worried a great deal about Baykonur. To whom would it belong? How would it continue to be operated? Good progress has now been made, however. We have documents signed by the two presidents, on the basis of which we are working out a list of facilities to be turned over to the Kazakh side and the terms of their operation. A special government commission has been set up headed by my deputy, General Borisyuk. Its members include representatives of the Energiya NPO [scientific production association], the Russian Space Agency, the Ministry of Foreign Affairs and the General Staff. A similar commission has been set up in Kazakhstan.

We have arrived at the conclusion that Russia cannot get by without Baykonur. Life is life, though. The space launch facility is located on the territory of a sovereign state, and we have to recognize this and observe that state's laws.

[Baberdin] That is all true, but something else is troubling. When I saw the Energiya-Buran launching complex at the space launch facility last year, I was simply amazed at its condition. My impression was one of neglect, of something not needed. Like the Strugatskiys in "The Stalker."

[Ivanov] You saw the situation correctly. We need to work out all of the problems as rapidly as possible. As long as they are up in the air, we are suffering losses on a grand scale every day, every hour. The Energiya-Buran program is being maintained for now. We have to preserve that which we have built up, though. And for that we need money, equipment and people. There is no money, the manning table is far from complete, and the equipment is aging. Another thing. Try to understand the mental state of those servicing the complex: engineers, technicians, operators, testing personnel. They have put their lives, their youth, the well-being of their families into the program, and we announce that it is not needed or is even harmful.

There are also many problems for the military construction workers at Baykonur. They once made up a powerful army, but following events of which we are all aware, it was transferred to the Kazakh Ministry of Defense and its ranks thinned considerably. And we need to prepare for winter, to service and repair the buildings and installations at the testing grounds. There are not enough workers, and the work is being shifted to the combat crews.

[Baberdin] And what is the situation in other areas of the CIS?

[Ivanov] Things are perhaps most alarming with respect to the control and measurement complex set up in Ukraine, at Simferopol and Yevpatoriya. These sites are essentially idle today. One third of the officers there have taken the oath to Ukraine, one third refused to do so, and the others have requested discharge.



We are presently working on these problems. We cannot get along without these KIKs [control and measurement complexes], of course. And what about those officers who did not take the oath. They need to be transferred to other Russian units. They lose their skills when they are not working with the control facilities. And one feels bad about the equipment. It is aging.

It is not all hopeless with respect to Ukraine, of course. I hope that we can gradually find constructive approaches. I flew in from Dnepropetrovsk the other day. The emergency commission has completed its work on the Zenit, and its launching is tentatively set for 3 November. There appear to be no problems. Once again we are concerned about how the Zenit is to be delivered to the space launch facility, however.

[Baberdin] One final question, Vladimir Leontyevich. Everything seems to be clear with respect to Baykonur. But Russia is a space power. In view of this, it simply must have its own space facility. How is Plesetsk regarded in this respect?

[Ivanov] That subject is easy and pleasant for me to discuss. I have given almost my entire life to Plesetsk, and I consider myself to be like a native of Arkhangelsk. I met my wife there, and my oldest son was born there. Plesetsk has to be Russia's space launch facility. I have already informed Boris Nikolayevich Yeltsin of this. Despite the fact that it is not well known, our northern space launch facility is the most "hard-working" in the world with respect to numbers of launchings. Incidentally, we are planning to launch the Star of Columbus satellite on 16 November of this year under the Space Flight: Europe-America 500 project. We have practically everything we need: four Gagarin launchers. They just have to be adapted to handle manned spacecraft. We need to think about the measurement equipment, the orbit inclinations, the landing sites for the modules.

At Plesetsk we are working on the entire range of missions in atmospheric, middle and outer space—military, scientific and national economic. Right now the Zenit launching complex is being built there. All of the necessary funds were allocated this year. Only the problem of placing the satellites into geostationary orbit remains, but it too can be solved.

To conclude our discussion I want to return to the first question. No matter how difficult, Russia will revive. It is and will continue to be a space power. Remember that we began it all in even more difficult times. We still need comprehensive space programs and bold thinking, because without this there is no grandeur of spirit, the spirit of Russia. We began with the first satellite, and we shall continue on.

#### **Theft of Weapons From Moscow Military Institute**

93UM0027A Moscow KRASNAYA ZVEZDA in Russian  
2 Oct 92 p 4

[Report by ITAR-TASS correspondent Roman Zadunayskiy: "Audacious Theft of Weapons From Military Institute of Russian Federation's Ministry of Defense"]

[Text] Moscow, 1 Oct—Unfortunately, the wave of thefts of army combat equipment has swept to the Russian capital. Tonight the Moscow Garrison's military prosecutor's office, together with the Moscow Criminal Investigation Agency and military counterintelligence as a whole, completed an operation to uncover the daring theft of a large quantity of weapons from the depot at the Military Institute of Russia's Ministry of Defense.

Major-General Justice Leonid Obyektov, military prosecutor for the Moscow Garrison, said in an exclusive interview granted to ITAR-TASS that a felony of this scope, brashness and lack of scruples had not occurred in Moscow in decades.

Leonid Obyektov went on to say that at 05:00 on 28 September the Moscow Garrison's military prosecutor's office received a report that the weapons dump at the Military Institute of the Russian Federation's Ministry of Defense at Lefortovo was on fire. Upon arriving at the scene, an operational investigative team from the military prosecutor's office discovered that an opening more than a half-meter in diameter had been knocked through the brickwork at an isolated spot in the institute wall. A man could easily crawl through it. A total of 117 combat "barrels" were missing, including AK assault rifles, SKS carbines and PM pistols and ammunition. The preliminary investigation revealed that the criminals, aware that a large quantity of ammunition remained at the depot, set it afire in order to cover up their tracks. There could have been casualties, since the institute's personnel barracks is located on the second floor.

The best field agents were assigned to investigate the crime. Chief Military Prosecutor Valentin Panichev, chief of the Main Directorate for Law-Enforcement in the Armed Forces of the Russian Ministry of Defense, took over control of the case. He demanded that the culprits be identified within the shortest possible period of time and that the weapons be found to keep them from being disseminated among criminals and the mafia militants to prevent additional problems from being created. The main perpetrators of the crime had been identified and arrested by the end of the first day, following a sleepless day and night of extensive, painstaking and risky work. Almost all of the stolen weapons were recovered from them, with the exception of several items which they had already sold to mafia dealers. In addition, they found millions of rubles in cash, silent weapons, grenade detonators and a TT pistol, which were not stolen from that depot. The last participant in the crime, the buyer of the weapons, had been arrested by the end of the second day. He was delivering a large sum of money to the seller as payment for a new batch of weapons.

Major-General Justice Leonid Obyektov concluded by saying that the investigation is still underway and the names of those who participated in the crime can therefore not be revealed. One can say, however, the fact that cadets at the Military Institute had a part in the crime

along with the criminals is alarming and disappointing. Officers with internal affairs agencies were also arrested in the case.

### **New Chief of Central Military Trade Directorate Interviewed**

93UM0020A Moscow KRASNAYA ZVEZDA in Russian  
7 Oct 92 p 2

[Interview with Colonel Viktor Ivanovich Tsarkov, chief of the Central Trade Directorate of the Russian Federation's Ministry of Defense, by KRASNAYA ZVEZDA correspondent Petr Altunin under the rubric "First Interview in the New Position": "Both Sellers and Buyers"]

[Text] Colonel Viktor Tsarkov was recently appointed chief of the Central Trade Directorate of the Russian Federation's Ministry of Defense.

From the KRASNAYA ZVEZDA file: Viktor Ivanovich Tsarkov was born in 1946 in the city of Karaganda. He completed the Volga Rear Service Military School in 1967 with a diploma in merchandising. He completed the Rear Service and Transport Military Academy in 1974. He has served in the Ural, Far East and Moscow military districts and the Group of Soviet Forces in Germany, occupying in succession the positions of chief of clothing supply of a regiment, a division and a district, chief of the Department of Orders and Deliveries of the GSVG [Group of Soviet Forces in Germany] and deputy chief of the Central Clothing Supply Directorate.

[Altunin] Viktor Ivanovich, you and I met in the Far East, where, as I recall, you headed the clothing supply service and persistently promoted the concept of autonomy for garrisons. Did you have a connection with military trade at that time?

[Tsarkov] I remember those times. Incidentally, I believe that autonomy for the garrisons is even more valid today in view of the unstable situation in a number of regions. With respect to interaction between these two services, we worked side by side and resolved common problems on an hourly basis: relations with suppliers, the production of uniforms, the provision of cultural and educational supplies. We jointly made the messing arrangements and organized mobile trade services.

[Altunin] So one could not say that you have now taken on an unfamiliar job, could one?

[Tsarkov] No, one could not. At the same time, I previously understood—and am even more aware today—that there are many specific features, subtleties and "secrets" in this field. I am encouraged by the fact that experienced and competent people work in the directorate and locally, a fact of which I became convinced during my first weeks of working in the commercial area. And this is the most important thing in today's new situation.

[Altunin] Many letters from readers complain about the shortage of goods in the Voyentorg [Military Trade

Directorate] stores and ask whether the Voyentorg should not be given a certain priority for supplying military personnel.

[Tsarkov] I am convinced that we should not be thrown into the free-for-all of the uncontrolled market. Officers, seagoing and shore-based warrant officers are on a rigid budget at garrisons large and small, receiving small wages by today's measurement. How could they keep up with the runaway inflation? A few months ago, prior to my arrival, the Russian government decided at the request of the Ministry of Defense to provide servicemen and their families with food items as part of the process of meeting state needs (previously, state orders). The quantity of food at Voyentorg stores will therefore be no less than last year. The prices are a different matter. They will not be the same as at the stalls and stands, but if they increase in the state trade system, there is nothing we can do. A great deal will depend upon the initiative and the business abilities of the military trade workers themselves, of course. Right now, if they can buy less expensive goods somewhere else, we welcome this. We are not just sellers, after all, but buyers as well.

[Altunin] You could obtain credits.

[Tsarkov] That is true. I have already learned that the matter of credits is not such a simple one, however. The commercial banks offer credit at interests of 50 percent or more. One bank was recently asking for 180 percent. We can handle only beneficial credit.

[Altunin] But is Gosbank [State Bank] not the only place to obtain that?

[Tsarkov] Yes, and it is extending credit to us on beneficial terms. On 7 September—again at the request of the Ministry of Defense—the Russian government decided to extend 5 billion rubles in credit to us at 10 percent annual interest for the procurement, storage and processing of fruits and vegetables. Primarily for the Far North. We have also asked the government to increase our circulating capital. We are hoping for an affirmative decision.

[Altunin] We know that the number of all sorts of abuses has not decreased in military trade. According to reports in the press, there are many in the Western Group of Forces, for example.

[Tsarkov] I know about that. And I consider it my primary duty to wage a basic campaign against them. I am cognizant of the fact that this will not be easy, however. We must have a united front, a joint effort by the administration, agencies of the military prosecutor and the entire public. The Western Group is a special case. There are many temptations there, and many people cannot resist them. I know that some Voyentorg workers were recently punished, including the chief of the trade directorate, following an inspection.

[Altunin] Viktor Ivanovich, one last question: What would you like to say to our readers through KRASNAYA ZVEZDA?

[Tsarkov] The situation in military trade is difficult, and I want to work with your help to improve services for the people. For our workers I wish success in their commercial activities, where we need not only professionalism but also—and perhaps most importantly—honesty, decency and good will.

I would also like to ask the Voyentorg workers (and we have 130,000) to subscribe to our ZVEZDOCHKA. I have already done so myself.

### **Russian Sport-Technical Chairman Anokhin Interviewed**

93UM0065A Moscow KRASNAYA ZVEZDA in Russian  
13 oct 92 p 2

[Interview with Major-General Aleksey Ivanovich Anokhin, chairman of the Russian Technical Sports Defense Organization, by KRASNAYA ZVEZDA correspondent Ruslan Makushin: "ROSTO Produces Patriots"]

[Text] The acronym ROSTO was first heard in September of last year. It stands for Russian Technical Sports Defense Organization. Major-General Aleksey Ivanovich Anokhin, chairman of its council, was interviewed by KRASNAYA ZVEZDA.

[Makushin] Can we say today that we have a new defense organization or has DOSAAF [Volunteer Society for Cooperation With the Army, Aviation and Fleet] just changed its name?

[Anokhin] ROSTO's date of birth is officially considered to be 25 September of last year, when its inaugural congress was held. This structure could only have come into being with the establishment of Russia's sovereignty.

[Makushin] What are the main tasks facing ROSTO?

[Anokhin] The main ones involve developing the technical sports and technical creativity, preparing the youth for labor and for defending the homeland, and assisting state and public organizations with the patriotic indoctrination of the upcoming generation.

[Makushin] There is a vast range of problems. Can you achieve what we want, given your capabilities?

[Anokhin] First of all we have the necessary training materials, equipment and facilities. They were built up over the decades by our public organization: Osoaviakhim [Society for Assistance to the Defense Aviation and Chemical Industry] DOSAAF and ROSTO. Today there are 2,827 technical sports, 93 aviation, 39 technical aviation and 25 hang-gliding clubs. The ROSTO system also has 111 schools for children and youth. Around 4 million school-age children of all ages participate in the sports clubs and the schools for children and youth.

In addition, the ROSTO training organizations and technical sports clubs train people in the widespread

technical fields for the civilian economy. We provide training as paid services in 79 technical fields. Each year the republics, krays and oblasts submit orders for us to train around 1 million specialists, 92 percent of whom are operators of all types of transport equipment.

[Makushin] And how are relations between the defense organization and the military department organized today?

[Anokhin] Filling state orders for the Ministry of Defense for the training of predraft youth and specialists needed by the army and navy is one of the main areas in the work performed by our organization. We already have an order for the training of specialists for the armed forces for next year. We operate on a contractual basis.

[Makushin] How are these costs paid?

[Anokhin] The necessary funds are allocated out of the state budget for training specialists for the armed forces. For other purposes ROSTO funds are derived, as in the past, from unsubsidized activities for profit, lotteries, sports events and other statutory activities. In general, training specialists for the army and navy in the ROSTO system cuts national defense costs considerably.

[Makushin] Aleksey Ivanovich, one would assume that training specialists for the armed forces and the civilian economy is not all the organization does.

[Anokhin] Of course not. We recently took on something new, for example. At the suggestion of the State Committee for Civil Defense, Emergencies and Mop-up Operations Following Natural Disasters, we began the task of setting up and employing 190 rescue teams in existing training organizations.

[Makushin] At the beginning of the interview we mentioned the charter, those parts which cover the purposes and the tasks of ROSTO. One of them is to contribute to the patriotic indoctrination of the youth. What does this involve today.

[Anokhin] In everything we do we shall help to develop in the youth a love for their homeland and respect for its history and the military deeds of their fathers and grandfathers, which have demonstrated the strength of spirit, nobility and valor, honor and dignity of our people. And, of course, a willingness in the youth to do their duty to protect our homeland.

[Makushin] One fairly frequently hears statements to the effect that ROSTO serves the interests of the military department and that it is the latter which determines the defense organization's main areas of endeavor.

[Anokhin] ROSTO is a public organization. It does not assist state structures but contributes to the shaping of the individual. We are not a militaristic or political organization but a patriotic one. That is the essence of it. We do not develop high ideals with words, however, but with vital and interesting activities.

## INTERREGIONAL MILITARY ISSUES

### Widespread Alcoholism Among Russian Troops in Lithuania Claimed

92UN2164C Vilnius LIETUVOS AIDAS in Lithuanian  
22 Aug 92 p 4

[Article by G. M. Parange: "Alcoholism in Russian Army Units Poses Serious Danger"]

[Text] Recently Russia's ministry of defense, joint CIS armed forces staff and the military prosecutor's office have become concerned with the spread of alcoholism in the army. Three times as many incidents of drunkenness in military units were registered in the first half of this year as last year. The drunken Russian soldier was already a stereotype in tsarist times.

The ministry of defense decided to strengthen the penalties for drunkenness in the army. But will it help?

Alcoholism is also widespread in the Russian Army units stationed in Lithuania. Drunken soldiers often violate the public order.

On August 14 about 23:00 on Lyna St. in Siauliai V. Laurinchiuk and J. Shenkiy of Russian army units No. 95846 and No. 55366 were detained for intoxication.

In Kedainiai police officers took the soldier V. Petrov of RA unit No. 11807 to a sobering station. On August 16 the soldier I. Karpov of military unit No. 32833 was brought to the same sobering station.

The head of military unit No. 41610, lieutenant-colonel S. Yegorov, was held involuntarily for a time in the Kedainiai medical sobering office.

On August 16 at 23:00 in Klaipeda rayon, at the third kilometer of the Priekule-Drevertina road, soldier A. Kalpasnikov of Russian army military unit No. 61415 lost control of a "URAL-4320" truck belonging to that same unit. The vehicle crossed over into the opposite traffic lane and crashed into another vehicle, UAZ-452, standing at a bus stop, driven by S. Rekasius. The driver of UAZ-452 was killed. The soldier fled the scene of the accident. While fleeing he again lost control of the vehicle and plunged into the Drevertina canal. The vehicle sank. Soldiers A. Kalpasnikov and A. Fekushin were detained. An unknown person who had been riding with the soldiers escaped.

### Ukrainization Among Western Troop Grouping

92UM1462B Moscow KRASNAYA ZVEZDA  
in Russian 11 Sep 92 p 2

[Article by KRASNAYA ZVEZDA correspondent Vladimir Yermolin: "Leave Ethnic Origin Out of It"]

[Text] The editorial office has received a letter carrying a postmark of the Western Group of Forces, with the return address naming an "Afanasyev" of a military unit. The letter deals more or less with "Ukrainization" of the troop grouping in Germany, alleging that the Western Group of Forces Headquarters consists of 90

percent of officers and warrant officers from Ukraine, that they all intend to take the oath of allegiance to Ukraine, and "Russian officers are being released and transferred to Russia." The letter goes on to make other claims. Therefore, we requested that our Western Group of Forces correspondent—Colonel V. Markushin—investigate the letter. His answer soon followed. It supplied us with figures refuting Afanasyev's statistics (for example, Colonel Anatoliy Belkin, a worker in the Personnel Directorate, informs us that in the Western Group of Forces Headquarters, every sixth person is a Ukrainian); officers familiar with the letter were upset over the bringing up of the question in general; and the commander of the military unit listed in the return address, Major General Nikolay Repin, declares that there is no Afanasyev serving in his unit, and that the letter is a pure fabrication.

The matter could be put to rest just there. All the more since I have a distaste for having anything to do with this kind of "signal." Well, I can allow that a situation may arise whereby some chief suddenly becomes possessed by the "ethnic situation" and takes up a personnel problem existing in a unit entrusted to him, basing his action on the fifth section, which relates to ethnic origin. This, especially considering everything that has come between Russia and Ukraine in the last year or two.

Be that as it may, it so happens that the Armed Forces of the former Soviet Union professed internationalism up until the very end. Karabakh had already flared up, but the watch continued in spaces of submarines, with the Armenian taking over for the Azerbaijani. Firefights broke out in Tskhinval, but the Georgian and the Ossetian got along with each other in the armor enclosing them. The Baltics decided to have nothing more to do with Russia—"Stay away from me, you evil thing!"—but the Russian, the Estonian, the Latvian, and the Lithuanian continued to serve at their PVO control panels on their posts located here and there in taiga boondocks. It may well be that my expressing an opinion different from that of the letter from "Afanasyev" may serve as an irritant. Who knows, it could be that the writer of that letter does indeed have a reason to be irritated. It may be that he has been pulling his weight all the way, but everyday troubles got the best of him: The years pass by, but the accursed Army problem of "where to serve, where to live" goes unanswered, and, in addition, there is no chance of retaining one's dignity, with people working hard on your right and left, but no hope of arbitration. A person's state of mind could be made even worse by a soon-to-come return to Russia, with the attendant threats of homelessness and—taking into account the rate of conversion of the pay—of impecuniosity. Or perhaps it is a matter of a new duty station, say one with severe Arctic landscapes, with associated feelings of boredom or an assignment that may not be to his liking. As far as that goes, there could be any number of factors accounting for our brotherly officer's lapse into



moody reflections. Also not to be excluded is the possibility that someone did indeed give Afanasyev cause to think about personnel policy in the light of an ethnic origin issue.

I can understand all that. But the question here is: Is it really necessary for us, the military, to play this kind of game, getting involved with the "map of nations"? It seems to me that this is not only unnecessary, but for the Army a kiss of death. Something of this sort can start innocently enough, such as a temptation to remind the leadership of the "current political moment." This person may consider himself to be a third-generation internationalist, but he chooses to face reality. To him it is clear that reality says that the Ukrainians now possess their own state; the Moldovans, theirs; the Georgians, theirs, etc. This being the case, it is possible to imagine the following highly unusual situation: We took a person and taught him, babied him, promote his people to generalcies, and what does he do but suddenly become overcome with the idea of a national rebirth, and this with such a vengeance that—watch out!—he may yet with everything we have done turn on us. I cannot state with any certainty that images of Dudayevs and Kostashes are not troubling the minds of Russian cadre personnel as they make their decision. Hence concern over the interests of a state on the part of a rank-and-file servant situated in the very midst of the Army, with his sending of a signal to a higher level. The man is worried about his state, but he is thinking of himself, also.

All right, then, what comes next? If we were to sum up the ethnic origin situation, what would we discover? That a particular nationality imposes a ceiling of a sergeant's rank; another nationality, captain, at most; but in a third, say one's own, is a generalcy out of the question? The same reasoning applies to access to assignments, and, to be sure, to classified information. If we are to grant that a person belonging to a very small minority can theoretically set himself up with his own state, can it be assumed that his career will as a result flourish? Can that be so?

However, the term "Russian" does not refer to ethnicity. And it is useful to bear in mind that Russian guns gained glory on the battlefield by virtue of the Georgian Bagration, the German Tottleben, the Armenian Bagramyan, and representatives of other ethnic groups, not only the Ivanovs (on whom the Russian soil itself unquestionably rests). Dividing us into ethnic categories to the point of bitter alienation and even enmity is a task racial purity ideologues cannot perform on a small scale. What is required there is insanity on a large scale. And it may be that they dream that the Army will serve as a pioneer in achieving racial cleansing. This would be to the great joy of ardent patriots on the one hand, and jingoists on the other. This would be so that all our victories of the past and future will be "smashing and resoundingly memorable." And there would be no Tottlebens, either.

I can see as well as anyone how centrifugal forces are cutting through the formerly unified Army ranks, carrying away under various banners yesterday's brothers-in-arms. Nothing can be done about that. This being the case, let us part in a worthy manner. In our situation, let us not give in to national hysteria, let us not start fighting over a worthless issue. For it is obvious that our parting as enemies, harboring insults, is the desired goal of many active politicians.

Coming surprisingly at that particular time was the wave of general sovereignization accompanied in a number of republics by national hysteria, also hitting some military men whose career was staggering to an end. Riding the crest of the wave to the heights of power, they acquired at once an assignment, a position, and attendant opportunities. Were it not for the nationality idea, they would have gotten nowhere. This scenario is what may propel the Afanasyevs to pick up a pen and issue promptings about what routes should be taken.

But alas! This is not to defend Russia, but merely to shed light on the situation (and let him who can prove otherwise say so): It seems to me that this kind of "ascending wave" has not rolled within the confines of the Russian Fatherland. Other waves have rolled, but not this one. Not yet. How good to cling to the hope that the rat race of the ethnicity careerists will bypass us. And let us not judge a man by the ending of his name, but by his behavior, his way of thinking, his mastery of his field of work.

Let Afanasyev not take offense, but we are consigning his letter to the files. Nonetheless, if he does possess factual information instead of mere emotional outpourings and general accusations, then let him write to whom he considers necessary. Let him seek his "truth." No one is about to deprive him of that right. However, my advice to the writer (or writers?): Leave the fifth section out of the matter. (The section in passports naming ethnic origin. Military personnel have no passport, but the principle is the same. They in turn have plenty of their own "fifth sections.") Let us leave this up to politicians to worry about, the ones who must harp on ethnic origin to stay afloat. Otherwise, we could all start fighting and cursing each other out, and this would be sad and shameful.

It is up to us to serve our people. The latter need not be a "fifth section," but rather a reliable shield over their head.

The multitudes who stood on Russian soil on Kulikovo Field, at Borodino, at the walls of Stalingrad and who died there, were not only Russians; it was all who knew in their heart that the soil was their Fatherland. And they got along without the "fifth section." And so can we.

#### **Helicopters Transferred From Ukraine to Russia**

WS0710131992 Kiev VECHIRNIY KYYIV  
in Ukrainian 22 Sep 92 p 1

[Text] According to the press center of the voluntary public organization "Crimea with Russia", four Mi-8

helicopters and five Mi-14 helicopters were ferried from Kachinsk military airport, Ukraine, to Anapa, Russia, at the beginning of September. Admiral I. Kasatonov thanked the pilots, who fulfilled that operation, for their "loyalty to the motherland". At the same time, the officers, who took the Ukrainian loyalty oath, are being transferred to the reserve at the Duzlavsk [name as transliterated] Naval Base near Yevpatoria, in the Crimea, the press center UNA [expansion unknown] reports. Only 10 percent of the personnel, out of 168 officers who had taken the Ukrainian oath, retained their posts.

### Review of Current Military Situation in Karabakh

92UM1514A Moscow KRASNAYA ZVEZDA in Russian 25 Sep 92 p 3

[Report by KRASNAYA ZVEZDA correspondent Vladimir Urban: "Karabakh: The Only Way to Win Is With Peace"]

[Text]

### The Sochi Agreement Takes Effect on the Night of 25 September

On 19 September, in the city of Sochi, the Armenian and Azerbaijani ministers of defense, Vazgen Sarkisyan and Rakhim Gaziyeu, with the mediation of Minister of Defense Pavel Grachev and Minister of Security Viktor Barannikov, members of the Security Council of the Russian Federation, as well as Georgia's Minister of Defense Tengiz Kitovani, concluded an important agreement, one described by many as sensational. Under the agreement they were to issue orders to all armed formations to halt military operations by 25 September and cease fire with all types of weapons on the night of 25 September. The moratorium is to cover not just the border between the two states, but also the Nagorno-Karabakh region.

The agreement seems sensational only at a hasty reading, however. Political factors influenced the ministers of defense to reach this agreement, of course, and there are going to be some things to explain to observers. First of all, the active peacekeeping role of Russia's political and military leadership has to be mentioned.

There were many other factors as well, of course. One would think the fact that events on the Karabakh front have developed in such a way that neither side can any longer accomplish its missions with military force is one considerable factor. It is therefore very informative to study the situation surrounding Karabakh on the day before the Sochi agreement takes effect.

### A Military Survey

#### I

The results of Azerbaijan's summer offensive had become clear by the beginning of September. It was generally successful. Launching it on 12 July, the national army seriously stumbled only once, when Karabakh detachments began advancing (some military

experts call it reconnaissance in force) toward Mardakert, previously abandoned by them.

This forced the Azerbaijanis to move considerable forces from the Lachin corridor toward Armenia's Krasnoselskiy Rayon to beef up their grouping in northern Karabakh. And the initiative in the Mardakert (Khankendy, the Azerbaijanis call it) region gradually shifted to the Azerbaijan Republic's armed forces. By 19 August the Karabakh forces had been driven from the area of the Sarsangskaya GES [Hydroelectric Power Plant].

And so, approximately 25 percent of the territory of Nagorno-Karabakh was under Azerbaijan's control by September. The Lachin corridor continued to be held by the "Armenian expeditionary corps," to use official Baku's terminology. This was the primary factor influencing the development of the situation in September.

The Karabakh self-defense forces continued to be able to receive reinforcements and ammunition from Armenia. And while static battles continued in the Mardakert area, the Armenians launched an unexpected offensive on the Agdam sector. According to some reports, only two battalions recently brought in through the Lachin corridor were involved in the combat operations there. They succeeded in capturing eight villages in two days, however. And so, the Azerbaijani command now had some cause for concern.

A tank brigade is deployed at Agdam, where the highways from Stepanakert and Martuni converge. If circumstances were right, it could be shifted to develop offensives on these two axes simultaneously. Ammunition dumps "privatized" from the Soviet Army are also located at Agdam, and a repair base for armored equipment is being set up there.

The two battalions could not carry out the supreme mission of a "campaign" against Agdam, of course. In addition, the self-defense forces, not recognized by the Nagorno-Karabakh Republic, did nothing to provide reinforcements for the efforts of its two subunits. The objective was obviously something else: to draw enemy forces away from the Northern part of the NKR [Nagorno-Karabakh Republic].

Not until 10 days later could Defense Minister Rakhim Gaziyeu state that the offensive against Agdam by the "Armenian corps" had failed.

#### II

Success in northern Karabakh does not mean victory throughout the zone, however. The military experts believe that Azerbaijan could only realize its unquestionable superiority under one condition: the elimination of the Lachin corridor, "cut out" by the Armenians when they captured the Azerbaijani city of Lachin on 18 May. If the corridor were eliminated, the "Armenian expeditionary corps" (somewhere on the order of 15,000-20,000 men) would be cut off from the main land.

Several attempts by the national army to lift the blockade of the road failed, however. The only thing the

Azerbaijanis could do was to shell motor-vehicle columns with artillery, and then only in the daytime. At night the motor vehicles ordinarily made it through to Karabakh.

Then a large detachment showed up near Lachin toward morning on 13 September. And although this attack was unsuccessful, there was no longer any doubt that the main events of the war would shift to this sector in the immediate future. And this prediction proved correct. A report even came out of Baku on 19 September that the area had been cut off. The day before, however, on 18 September, according to Azerbaijani sources, subunits of a mountain rifle regiment crossed the Karabakh range (running along the western border of the NKR) and occupied several villages in the Shusha area.

A denial was issued from Stepanakert on Saturday, to be sure. And each day of this week it was announced that the Karabakh self-defense forces continued to hold this "humanitarian corridor." We know that the fighting continued on 20, 21 and 22 September. And with the alternating success, on 23 September the Information Analysis Center of the Azerbaijani Ministry of Defense, among other things, accused the Armenian side of violating the border and "attacking with large forces" the national army's position in the Lachin area.

All this time Armenian columns were traveling the Stepanakert-Goris road, however. The Azerbaijani forces operating from the Kelbadzhar direction were apparently halted 10-12 kilometers or so from the "humanitarian corridor." And so, the ultimatum issued to the enemy on national television by the leadership of the Azerbaijani Republic's armed forces on 20 September that the "Armenian armed forces be withdrawn from the territory of Azerbaijan into Karabakh within 48 hours" was obviously mostly for propaganda.

I believe Baku now clearly understands that the national army can hardly succeed in drastically altering the situation on the entire Karabakh front before cold weather sets in, and it is questionable whether such an attempt would be successful at any rate. Within a month or two the unprepared commanders and soldiers in the mountains will be unable to make active use of the armored equipment, of which Azerbaijan has a superiority. And, employing primarily the tactic of forcing out the enemy, the national army could lose the initiative. Karabakh's guerilla activities (which, incidentally, have been highly successful) are capable of nullifying the results of Azerbaijan's summer offensive.

The unstable situation on the Karabakh front has generally resulted in stepped-up bombing of populated civilian areas. This has occurred also in the present situation. Azerbaijani aircraft have carried out a raid on Stepanakert, and artillery from the Armenian side has shelled villages in Zangelanskiy and Kubatlinskiy rayons.

### III

We can see it is becoming increasingly clear in general that the situation on the Armenian-Azerbaijani border and in

the Nagorno-Karabakh area has essentially come to an impasse. Added to this are problems being experienced by the warring sides with respect to equipment and armaments. Combat vehicles are increasingly being put out of action not only because of combat losses, but also due to incompetent servicing and a lack of repair facilities and spare parts.

It appears that both Baku and Yerevan are beginning to understand that the war is sapping the final strength of the republics. The Sochi agreement is just a means of salvation for them, an opportunity to save themselves. Perhaps their last opportunity.

The agreement signed by the defense ministers of Armenia and Azerbaijan is to take effect at midnight tonight. A great deal will depend upon the final moves by the parties to the agreement, however. And it should be born in mind that all previous attempts to achieve a cease-fire have been unsuccessful due to the absence of a system for implementing it. The Sochi agreement makes it possible rapidly to set up such a system, and the agreement itself calls for a well-organized system for monitoring the cease-fire and the separation of the warring sides.

It is perfectly possible that there will be groupings which will not want to obey the orders to cease combat operations. Peacekeeping forces could be introduced to destroy them. There is no other way. Then, when the military give the politicians a chance, the governments and parliaments must engage in a dialog.

Otherwise, the bloodshed will continue.

**Incidentally, the agreement on a cease-fire on the border between the Nakhchivan Autonomous Republic and Armenia took effect at 02:00 on 22 September. This was agreed to by government delegations from Azerbaijan and Armenia at a meeting in the autonomous republic's Sadarakskiy Rayon.**

The parties also agreed to extend the agreement to cover Azerbaijan's Zangelanskiy and Kubatlinskiy rayons and Megrinskiy and Kafanskiy rayons in Armenia. They have reached agreement on the restoration of rail service between the two republics and on the transmission of electric power to Nakhchivan from Armenia. These issues have been turned over to specialists for the final touches, who will give their final decision on the operation of these lines of communication this Friday, at the next meeting of the government delegations.

### Controversy over Oath-taking at Sevastopol Naval Institute

*WS1310133592 Kiev NARODNA ARMIYA  
in Ukrainian 29 Sep 92 p 1*

[“Statement by military delegations of Ukraine and Russia on latest mass media features” signed by Lieutenant General A. Lopata, deputy defense minister of Ukraine, and Rear Admiral V. Viktorov, deputy chief of Personnel Department of the Russian Navy]



[Text] As is already known, in compliance with resolution of Ukrainian Cabinet of Ministers No. 490 of 19 August, 1992, on the reform of military education, Sevastopol naval schools are being merged into the Sevastopol Naval Institute.

According to the agreement between Ukrainian and Russian Defense Ministries about training of commissioned officers, signed in Dagomys on 23 June, 1992, citizens of Russia and other CIS states, cadets of two to five years, continue to receive free education until finishing this institute. Additionally, it is planned that they will take an oath of allegiance to their own states. Procedures concerning instructions for the first-year cadets will be determined by relevant agreements.

The process of creation of the institute has been broadly covered by the media. Unfortunately, some facts have been distorted.

On 23 September, 1992, the evening news program of Ostankino TV company reported an ultimatum allegedly given to cadets of Sevastopol naval schools: "... either you swear loyalty to Ukraine or you will be deported from the Republic." On that same day, KRASNAYA ZVEZDA published a similar article that took a biased approach to the issue of taking an oath at the institute.

These media reports do not correspond to the facts and do not contribute to the training of cadres for the Russian and Ukrainian Navies.

We believe that mass media should be more responsible when treating problems concerning the fate of cadets—citizens of Russia and Ukraine—in order not to undermine the faith of the fraternal peoples in the possibility of a constructive solution to problems connected with training highly qualified specialists with regard for the interests of both countries.

#### **Russian Army To Withdraw from Northern Camp in Vilnius**

*PM1210130192 Moscow KRASNAYA ZVEZDA in Russian 9 Oct 92 p 3*

[Vasiliy Belyakov report: "Russian Troops Leaving Lithuanian Capital's Northern Military Camp"]

[Text] Northwestern Group of Forces Press Center, Vilnius—In line with a mutual agreement between the Lithuanian and Russian sides at the talks on issues regarding the withdrawal of Armed Forces, the military unit stationed at the northern camp in Vilnius will soon leave Lithuanian territory. Several hundred officers and warrant officers and the entire complement of privates and sergeants are leaving, and tanks, infantry fighting vehicles, and armored personnel carriers are being withdrawn. The Russian Army's military installation in the very center of the Lithuanian capital, over which tension has been artificially whipped up for some time, will thus cease to exist in the next few weeks.

## **UKRAINE**

### **New Military District Commander Appointed**

*WS1310133492 Kiev NARODNA ARMIYA in Ukrainian 29 Sep 92 p 1*

[Decree issued by Ukrainian President Kravchuk in Kiev on 29 September]

[Text] 1. Hereby decree that Lieutenant-General Valeriy Mikolayovich Stepanov shall be discharged from the duties of commander of the Carpathian Military District.

2. Hereby decree that Lieutenant-General Vasyl Tymofiyovich Sobkov shall be appointed commander of the Carpathian Military District, relieving him from the duties of chief of staff and first deputy defense minister.

[Signed] President of Ukraine

L. Kravchuk.

The City of Kiev

29 September, 1992.

## **BALTIC STATES**

### **Lithuanian Navy to Get Baltic Fleet Ships**

*93UN0111A Vilnius EKHO LITVY in Russian 2 Oct 92 p 6*

[Interview with Lieutenant-Colonel Valdas Tutkus, chief of the Joint Staff of Lithuania's Ministry of National Defense, and Naval Captain Eugenijus Myliauskas, chief of the Navy Department of the Joint Staff of the Ministry of National Defense, by Kaliningrad journalist Oleg Shcheblykin: "Latvia's Navy: The First Steps in Cooperation With Russia"]

[Text] Vilnius-Kaliningrad—The Baltic Fleet is transferring two ASW ships and two torpedo boats to our republic's Ministry of National Defense.

Kaliningrad journalist Oleg Shcheblykin interviewed Lieutenant-Colonel Valdis Tutkus, chief of the Joint Staff of Lithuania's Ministry of National Defense, and Eugenijus Myliauskas, chief of the Navy Department of the Joint Staff of the Ministry of National Defense, on the subject.

[Shcheblykin] Why does Lithuania need its own navy?

[V. Tutkus] Our naval forces will differ from Russia's Navy. We plan to form a division of ships. We shall not enlarge our naval forces within the next 5-10 years. For one thing, Lithuania does not have the wherewithal to maintain a large navy, and, in the second place, there is no need for this. It will be the fleet's mission to guard Lithuania's economic zone and also to protect the fisheries against poachers. That is, to monitor them. Many poachers of them now openly enter our waters. We are aware of this, but we can do nothing for now. We do not intend to go to war with anyone.

[E. Myliauskas] All states with access to the sea have their own navy. Lithuania must have one too, a small but well-armed navy. Within the limits of our realistic capabilities.

[Shcheblykin] You are acquiring ships. If they are not to remain anchored in port, however, you need trained crews, a base and a great deal more. Does Lithuania's military department have all of this?

[V. Tutkus] The coast guard service is presently being withdrawn from the command of the border troops, and a separate entity is being created out of it. We still do not know what the navy will be called officially. That is not so important. Right now we have around 300 officers and enlisted personnel.

[E. Myliauskas] Lithuania is first among the Baltic countries with respect to officer manning level. Incidentally, many of them served in the Baltic in the past. They include Capt 1st Rank R. Baltuska, captains 2nd rank V. Sirevicius, A. Leisis and V. Urbas, and others. We have officers from all four of Russia's fleets.

I was one of the first to be invited to join the Ministry of National Defense. We began with practically nothing. We worked out our own seagoing personnel table. We based it on Russia's Navy Regulations, which go back to Peter's navy. We deleted certain things. The position of political worker, for example. We took some things from the navy regulations of Great Britain and Germany. We encountered a problem in that the Lithuanian language does not include enough naval terminology. We were greatly assisted by a dictionary of naval terms published last year by the Lithuanian Language Institute. Many terms were borrowed from Russian, which had, in turn, taken them from Dutch. Peter I based all of his naval science on the Dutch model, you know.

[Shcheblykin] What ships do you have as of right now?

[E. Myliauskas] We have a former research vessel. We are using it as a hydrographic and training vessel. We have a fishing vessel and a pilot boat. Naturally, the ships we receive from the Baltic Fleet will form the backbone of our naval forces.

[Shcheblykin] And where will they be based?

[E. Myliauskas] At Klaipeda. It has the wharfs. We also plan to locate headquarters there so that it can exercise command directly at the site. I do not believe we will have any difficulty finding quarters for it. After all, an entire division is being withdrawn from Klaipeda.

Lithuania previously had another port at (Shvyantoyi). The wharfs are still there. Ships with a draft of up to 3 meters moored there. It was planned to develop the facility, but that is impossible right now. The port has practically been covered with sand. A launch can barely get into it today.

[Shcheblykin] Looking into the future, a regular fleet has to be constantly replenished with both officers and seamen. How is the fleet going to be manned, and on what basis?

[V. Tutkus] This is under discussion right now. Will all of the military personnel be professionals or will we have a combined manning system later? Our officers and NCOs are professionals at this time. That is, they serve under contract. Lower-ranking personnel are drafted for a brief term. We think that the seamen too will serve under contract in the future. The naval forces of the NATO nations can serve as an example.

We shall take on specialists as they graduate from civilian institutes. We plan to draw upon civilian seamen in related fields. We have recently had a lot of officers coming to us. We make no distinction on the basis of nationality. They merely have to be citizens of Lithuania and know the Lithuanian language.

In view of the fact that our ships will be former Russian ships, we want to have instructors on them, at least in the beginning.

[E. Myliauskas] The crews which sail the ships to Klaipeda will probably remain on them for at least 45 days to train our crews. We shall ask the Russians to allow this.

[Shcheblykin] Do you have plans for assistance from sponsors from countries of the West?

[V. Tutkus] Yes. They are coming to us with their proposals. We have made Russia our choice. We shall therefore cooperate mainly with it.

[E. Myliauskas] All-around interest is being demonstrated. And not just at the official level. Letters are coming in from around the world. We recently received an offer from P. Labanauskas of Canada, for example. He was the last captain of a training steamship in 1940. Lithuania is presently being reborn. Our friends in the West therefore want the flags lowered in 1940 to fly over the ships again. They also want the design to remain basically the same.

[Shcheblykin] Mr. Myliauskas, you are a former officer of Russia. What significance does that which is occurring today have for you?

[E. Myliauskas] What I am doing today is a duty in the highest sense of the word. When the first Lithuanian military ship sets out to sea, I can feel that my life has not been lived in vain.

[Shcheblykin] Thank you for the interview.

## CAUCASIAN STATES

### Georgian Su-25 Said to Bomb, Strafe Gagra

93UM0025A Moscow KRASNAYA ZVEZDA in Russian  
3 Oct 92 p 1

[Report from the Press Service of the Russian Federation's Ministry of Defense: "Su-25s Over Gagra: There Were Casualties"]

[Text] According to reports from members of Russia's peacekeeping forces the Georgian side is making extensive use of Su-25s. At 09:00 on 2 October Georgian

aircraft carrying Russian Air Force markings and helicopters bombed and strafed the city of Gagra. There were casualties among the civilian population. The strikes were carried out mainly by aircraft flying in from the sea. There is an Su-25 plant in Tbilisi, of course.

### **Ministry of Defense, General Staff Established in Abkhaziya**

93UM0062A Moscow KRSNAYA ZVEZDA in Russian  
14 Oct 92 p 1

[Report: "A Military Department and General Staff Have Been Formed in Abkhaziya, and Their Heads Have Been Named"]

[Text] Decrees establishing the Ministry of Defense and General Staff of Abkhaziya were passed at a Sunday session of the Presidium of the Supreme Soviet of Abkhaziya. An ITAR-TASS correspondent has learned this from competent military sources. Colonel Vladimir Arzhba has been appointed acting minister of defense, and Sultan Sosnaliyev, former commander of the self-defense forces, has been appointed chief of the General Staff.

## **CENTRAL ASIAN STATES**

### **Correspondent Report on Clashes in Kurgan-Tyube**

93UM0018A Moscow KRSNAYA ZVEZDA in Russian  
6 Oct 92 pp 1, 3

[Article by Sergey Dyshev, with an update by Anatoliy Ladin: "Bloody Days in Kurgan-Tyube: Our Correspondents Returning From a Fact-Finding Trip to Tajikistan Report"]

[Text] A youngish man with a black beard came out of the regimental headquarters building and headed quickly for an armored personnel carrier under military escort. Something unexpected suddenly happened: Women rushed out to cut him off. The man barely managed to dive into the side hatch, while the wildly screaming women were falling upon the closed ranks of paratroopers. These youngsters, who found themselves on this land just yesterday by the luck of the draw, suffered the curses and blows of weak women's hands submissively, and with horror. The armored personnel carrier did manage to break out of the ring, but an angry noisy mob was waiting for it beyond the gate. The armored vehicle made a sharp right. And there in the middle of the road was an old woman, groaning and wailing with her arms raised skyward.

In the end, the military were finally able to get Domullo Abdulgafar out. Having agreed to the negotiations, he knew that his security was guaranteed. Not by the armor of the armored personnel carrier, but by the word of an officer.

The mob at the gate of the unit did not disperse. We came up to the woman, and she told us, upon calming down, that she had lost four sons on that terrible day of

atrocious reprisals against people in Lomonosovo—a town in Kurgan-Tyube. On learning that we were correspondents, she asked us to write down her name: Fayziliso Takhmatova. We were surrounded, and like it or not, we were forced to begin a nightmarishly unending list of the names of people who had been flayed and burned alive, atrociously murdered, with blood-chilling perversion, or who simply disappeared without a trace. Everyone in the crowd nurtured the feeble hope that when the newspaper published these names, the lost relatives would suddenly turn up.

"There was an 80-year-old woman by the name of Dusa Molodtsova. She hobbled off for water with her cane. A sniper fired once, and then again—a hit. She lay there all day—no one could get near her."

"Even children were taken away. Later on little shoes recognized as belonging to the children were found in the basement, in the executive committee building."

"If your passport said you were from Lomonosovo," a Russian woman—a teacher—sobbed through her tears, "they put the screws to you indiscriminately. I couldn't understand why, but they explained that we had to pay the price!"

"Why is Ostankino television and the press not telling the truth about us?" they shouted in our faces. What could we answer them?

There was a worker by the name of Yatim Ironov. His wife Lyuba and seven children—six daughters and a boy—disappeared. He himself is from the Sovkhoz imeni Kirov.

There was Kenzha Sharipov from Lomonosovo. They took away her son of 21 years, Abdukhalmim.

Khalmizo Davlatova. A brother and two sons killed.

Lokhayba Rakhimova's husband was able to free himself from the assassins. But three sons were killed.

They pulled bodies out of the Vakhsha for an entire week, mutilated and maimed so atrociously that words cannot be found to describe it. It was virtually as if satanic powers had invaded this land of plenty. "They are worse than the fascists!" the gravediggers said over and over again in the manner of an incantation, because there was nothing with which to compare these atrocities in the cruel memory of our history.

In order to at least try to understand, no, not the cause, but the events leading up to the Middle-Age nightmare of the 25th, we need to return to the incidents of 2 September. This was the day on which a rally was convened in front of the oblast executive committee building, almost on the Dushanbe model, consisting of Garmtsy—the "opposition" or "Vovchiki," and the Kulyabtsy, or the "Yurchiki." Such "pet names" are now used most commonly. The purpose of the rally was to pacify the opposing sides. It ended in unexpected tragedy: Cold-blooded fire was opened on the peaceful Kulyabtsy with the intent to kill. Many died on the spot. Half-crazed people rushed in the direction of the Uzbek town of

Urgut. The rest of the exits from the square were blocked with vehicles ahead of time. Members of the "opposition" entered the town allegedly in order to destroy the detachment of Kulyabtsy under the command of Langari. The result of the "battle" was terrible: The town was plundered and burned, and literally wiped off the face of the earth. Sixteen thousand refugees, many killed. Then the "victors" demanded that the people return to the smoldering ashes. But the Uzbeks refused, being afraid to do so. Buses were purchased with donations from persons who had money, and some of the people of Urgut were able to break out of the blockade, abandoning the city forever. "The road of life"—such was the name given to this road of bitterness. The refugees were welcomed in Kulyab, Khodzhen, Tashkent and Samarkand. If they only knew the terrible fate they had escaped.

Government structures failed to act. The "opposition" dictated its own terms. The roads were watched. The city's population was without bread, milk and food products for yet another week. To add to all of this, it was also starved for information: Newspapers were not coming in, Ostankino television was disconnected, and Iranian television penetrated ever more persistently into the Dushanbe channels.

Refugees were given shelter in Lomonosovo. Shared misfortune brought the people closer together. Some were accommodated with families, others in School No 7. They were fed in the dining hall.

But the conflict continued to grow. The "Vovchiki" decided to make the first blow. According to their assertions, 34 fighters from the Kulyab side had concentrated in Lomonosovo. Part of the town was under Russian jurisdiction—seven officers lived there. The consent of the military was required. Regiment commander Lieutenant Colonel Yevgeniy Merkulov was forced by considerations of neutrality to allow inspection of the town, but with the mandatory participation of representatives of internal affairs organs, the committee for national security and the military.

The leader of the "purge," Domullo Abdulgafar, lied. The military and representatives of the national security committee were pushed aside. A band of marauders struck Lomonosovo. Several men from the local self-defense detachment (their armament consisted of two or three single-barreled shotguns, a lance taken from the school gym, and sticks) were taken first. People were herded out of their homes and formed up in the backyards. Then the mass executions began. In front of everyone, in front of the children and the women, the school director and the director of studies were shot—for sheltering refugees! They killed two cooks—so that the refugees would not be fed!

According to information that I would be hard-pressed to call official, seven persons were executed that day. What awaited the rest, what fate was being prepared for them by these social outcasts, whose protectors had talked so long with so much rhetoric about democracy?

The bandits took ample time to make their preparations. They threw furniture and clothing out of the apartment windows, sparing not even the people's oldest rags. All of it was loaded into trucks. Then it was the turn of the people. Around 16 men were singled out and herded into buses. Later on the mutilated bodies of some of them were to be found in the basements of the oblast executive committee and the internal affairs administration—the walls there are still impregnated with blood. Only a handful of them were able to flee. The rest simply disappeared.

Major Sergey Rebrov, who had been taken hostage together with other officers by the Kulyabtsy (our newspaper wrote about this), related how they tried to make him come over to their side:

"They told me: 'Do you want to see what the "Vovchiki" are doing?' They took me to the Internal Affairs Administration building. KamAZ trucks were parked outside. I looked in, and I recoiled in horror. They were packed full of bodies. Russian, Tajik, Uzbek.... They showed me a body that looked as if it had been shredded with a knife, beginning at the legs and ending with the face. The others had all of their limbs cut off, the hands were flayed, nails were torn out, needles protruded from the pads of the fingers, and faces were scorched. I was made to look at bodies with the hands shot off. 'So that they wouldn't be able to shoot even after death!'"

The number of victims in Kurgan-Tyube is beyond reckoning. Muslims bury their dead on the same day, prior to sunset. Fresh graves could be seen in backyards and gardens, and on the banks of canals.

What awaits this lifeless city, stunned by the horror? Broken store windows, looted stores, black fire scars on multistory dwellings. This is in the center of the city. A Volga passenger car racing for cover around a corner at breakneck speed bristled with assault rifles. Dark window openings stared vacantly into the street from the personal services building. Dust lingered in the dead air, like the orange haze accompanying a setting sun. And only the trees lining both sides of the streets seemed to quietly remind one that some time ago this was a happy, warm provincial town in Kurgan-Tyube, in which no one was concerned as to what nationality you were, and why you had come.

The silence was once again pierced by gunfire. A tank gun thudded deeply. The Kulyabtsy were defending the city.

Emankul Rustamov, a participant of the Patriotic War and a courageous veteran of Stalingrad, said bitterly as he stood on the ruins of his house:

"I was 14 years old when I came here from Samarkand. I am a group 2 invalid. I have 10 children and 13 grandchildren. I remember in Stalingrad wanting to count the number of bullet holes in Sergeant Pavlov's home. And now I have the same kind of home as well. A militiaman was killed right here. They're no longer doing it just to seize power. They're simply robbing the town



blind. They took away everything; not even a hose, an abacus and needles were left behind. They were like locusts. I hid my pension of 1200 rubles beneath the floor in an old overshoe. They crawled down there like rats, and took it! They say that they are fighting for Islam, but they themselves burned my Koran and another 15 religious books. Where is the government for which I labored for 46 years? Write this down, all of it. I am 68 years old, and I no longer fear anything! Everything has been destroyed. Even my medals were burned up."

The old man walked away, and then returned with a blackened, clinkered chunk of metal. It was heavy and cold. And it was hard to believe that these decorations had survived the fire of the war years.

#### **In the Last Hour, by Anatoliy Ladin**

Exchanges of gunfire continued here and there in Kurgan-Tyube. Communications have been cut once again, and information on the situation can be obtained only by radio. According to the last report, the oblast center was once again divided into two spheres of influence. Forces of the anti-Nabiyev opposition (probably a People's Guard regiment) had penetrated deep into the city once again. The streets and houses are empty. The opposing groupings never cease proclaiming that they intend to

fight on until victory. But because neither side is sufficiently strong, the situation is more reminiscent of a half-dead campfire. No one will say today how much longer it is to smolder, how much longer the armed conflict, which snuffs out human lives every day, is to go on.

I was told at the headquarters of the 201st Motorized Rifle Division that two servicemen received light wounds from random gunfire on Saturday and Sunday. Both of these cases occurred in Kurgan-Tyube, with one of the soldiers being wounded while on the unit's territory. On the whole, the situation around the regiments stationed in Kurgan-Tyube and Kulyab has stabilized to a significant extent. Lieutenant Colonel Nikolay Dantsevich, the chief of staff of the motorized rifle regiment in Kulyab, said that the regiment had been visited by representatives of the Kulyab community and the clergy. They presented the regiment with two color television sets, watermelons and grapes.

A rally was held in the morning of 5 October in Dushanbe, in Ozodi Square. The participants of the rally voiced their support for the fastest possible cessation of the bloodshed, and demanded radical decisions from the government to restore peace and tranquillity in the republic.

## DEFENSE INDUSTRY

### Arzamas-16 Nuclear Weapons Designer Interviewed

934P0001A Moscow DELOVOY MIR in Russian  
12 Sep 92 p 10

[Interview with nuclear weapons chief designer Stanislav Nikolayevich Voronin by Vladimir Gubarev at Arzamas-16; date not given: "Twenty Thousand Megatonnes. For What? Concerning Not Only the Fate of the Bombs and Weapons But Also the Future of Russia"]

[Text] The "dove of peace," which had become so popular in the recent past, has now disappeared. A holy place does not long remain empty, and here on the pages of the newspapers and in everyday usage, new "feathered friends" have appeared—"Chernobyl nightingales," "tomtits of glasnost," "eagles of perestroika," "blind hawks," "business blue tits," and "swans of pornography." If you like the list can go on endlessly if you set yourself the goal of compiling a "Dictionary of Perestroika." But the purpose of our meeting with Stanislav Nikolayevich Voronin was something different, and so I have named only a few of the names that have been adopted today in society. And I did not do it haphazardly because quite recently both Voronin and I were numbered in the same flock—"blind hawks."

The controversies about nuclear weapons, which almost immediately grew into demands for their developers to halt their work, are today as much in vogue as the discussions about nuclear power stations. Typically, the problems of the Chernobyl power station are discussed by those who did not appear there or in the vicinity of Kiev during the cleanup after the accident, while atomic and hydrogen bombs are discussed by politicians and environmentalists whose knowledge of physics is limited to their lessons at secondary school. This is not a reproach but a call to the people who now sometimes occupy a very high position in the government and have a closer acquaintance with the essence of the matter, so that they do not lapse into absurd positions that evoke only smiles among the professionals.

Examples? Of course.

USSR President Mikhail Gorbachev announces that we have methods for detecting nuclear weapons from space, including aboard U.S. warships. The scientists, ours and the Americans', are in shock—at the present stage of technology this is impossible! But a "global experiment" is organized on the Black Sea and dozens of journalists gather there... and there is total silence. An effective political statement is nothing but a bluff.

There is a similar story for President of Russia Boris Yeltsin when he announced that our missiles have been "retargeted" away from American cities.

President of Ukraine Leonid Kravchuk is not backward in this. His "sensational" statement that in Ukraine they will themselves dismantle tactical nuclear weapons and then store them (!) in the Chernobyl zone was, to say the

least, calculated only for those people who have no understanding of nuclear weapons.

If presidents allow themselves to do this, why do their political advisers not speak out. We have one effective "revelation" after another, for example, that in the former USSR they secretly (!) conducted nuclear explosions in oil and gas deposits and created underground storage facilities and even lakes. And then the "investigations" start, and the search for witnesses, in short, passions are inflamed. And all one has to do is take up the newspapers files of, for example, KOMSOMOLSKAYA PRAVDA or PRAVDA, and one can read about these experiments in the greatest of detail. I say nothing about books; there have been several, and not just for specialists but for the mass audience, where the "Plowshare" program conducted in the United States, and our program to use nuclear explosions for peaceful purposes have been described. Well fine, I agree: Young people might not know what happened almost 20 years ago, how the terrible gushers of burning oil and gas were extinguished in Urta-Bulak and Pamuk, or a storage facility was made in Orenburg for gas condensate, but state counselors should know this by dint of their duties. In an extreme case it is possible to refer to the experts, who can provide detailed information. Or even to journalists who were present not only at the launches of cosmonauts but also at nuclear explosions for peaceful purposes. Your obedient servant was among them, and thus I have a right to say this.

At one meeting with French and Japanese journalists Stanislav Voronin and I and several designers talked in detail about the harm that comes from ignorance, and from those numerous newspaper canards that turn up in our press. We talked candidly about what we think. And the reaction was not long in coming: A letter appeared from a group of scientists and journalists who condemned us and called us "blind hawks" that just wanted to blow up the planet. Naturally, it was precisely those people who were concerned about it and about our welfare, not other "Voronins" and "Gubarevs." Political authority, as is known, is not squeamish about using any methods, if only people talk about them. Perhaps in "pure" politics this is justified, but when it is a question of nuclear weapons it is essential to be extremely careful and—the main thing—to understand what we are talking about.

The experience of Chernobyl teaches this. Its lessons. And one of them is to act not more than a year after a tragedy but before it happens, so as to prevent it, or at least, if it has already occurred, not to allow it to grow. However, it is always safer to talk about things in comfortable and prestigious offices than to work at the epicenter of a tragedy or dismantle nuclear weapons with one's own hands.

Populism in our field is very dangerous. This is how Voronin opened our conversation. It can lead to catastrophe because people are disoriented. It is always essential to remember that we are dealing with dangerous technologies, and fortunately no major mistakes have yet

been made; we have had no accidents with weapons. So why deliberately provoke them by disparaging and insulting people who work in this complex?

Stanislav Nikolayevich returned from Moscow to Arzamas-16 in the morning. The day before he had met with Russian deputies and informed them about the state of affairs with respect to nuclear disarmament.

"It is essential to carry out explanatory work," he had advised. "Although to be honest, a chief designer does have other tasks... But what can be done, this is the theme..."

The environmental situation in the Far North was debated in the Supreme Soviet. Naturally emotions ran high about the nuclear tests on Novaya Zemlya—once again all the ills of the North can now be attributed to the nuclear people. In contrast to the environmentalists, they had prepared for that meeting: They presented a report from three independence commissions, none of which, incidentally, had any connection with Arzamas-16. Yes, the scientists did confirm that there are several spots on Novaya Zemlya (with a radius of about 150 meters) where the background radiation is elevated. In other places—and that is virtually all the territory of the islands—the background radiation is lower than in Moscow.

I have the impression, Voronin admits, that no one had familiarized themselves with the conclusions of the commission or the reports from the institute that has been dealing with this problem for several decades. Incidentally, the Norwegians, Finns, and Swedes have carefully studied the documents and they agree with them, while here there is indifference... The impression is that there is a desire to ascribe everything to us, even though the problems of the North and the effect of a certain technological stress is unusually acute. They must be solved immediately, but this is difficult work... So here we have a solution: Blame the nuclear people. But this will not alter the situation, and the ecology of the North is crossing the threshold of catastrophe. If only it has not happened... No, we need to tilt not at windmills but at the real danger!

**[Gubarev]** Stanislav Nikolayevich, you are a chief designer of atomic and hydrogen weapons. As far as I am aware, only four people in the country hold this title, or, more accurately, occupy such a post. So, let us familiarize ourselves a little better with this: How old are you and how long did you work at Arzamas-16?

**[Voronin]** I am 61. I have been working with weapons since 1954.

**[Gubarev]** Are you a Hero [of Socialist Labor]?

**[Voronin]** No.

**[Gubarev]** A Lenin or State Prize laureate?

**[Voronin]** Yes.

**[Gubarev]** What are your scientific credentials?

**[Voronin]** Candidate of sciences.

**[Gubarev]** That is all?

**[Voronin]** I never defended a thesis... My colleagues reproach me but in fact I never did, and indeed I begrudged the time spent on writing a dissertation and defending it, and so forth. And to be honest, I absolutely did not need it.

**[Gubarev]** Let us start our conversation with two factors—**weapons safety and the environment. Have you always thought about this?**

**[Voronin]** At the very outset of the work, of course, I did not think about the environment. And primarily because I am not an expert in that field. Weapons safety is another matter. For me it was always a priority. It is simply that the level of insuring this safety has changed markedly during this time. The requirements, of course, have changed, and they have left their mark on weapons design.

**[Gubarev]** For example?

**[Voronin]** In general I can say this... The first items we had were "nuclear-dangerous," that is, in accidents and explosions with conventional explosives, which are in the weapon, there could have been an incomplete nuclear explosion. So special steps were taken; in particular, fissionable materials and explosives were stored separately. They were brought together only before a weapon was to be used. And the detonators were placed at the very last moment.

**[Gubarev]** And this is why it was very dangerous work?

**[Voronin]** Of course. Operations were carried out under special control and they were done by top-class experts. Naturally, everyone withdrew to a distance when these operations were being carried out.

**[Gubarev]** I remember the "silver tent" that only the "hardware men" could enter, and how they ceremonially, almost haughtily, would go there in their snow-white gloves... There was a certain air of mystery, and only the ordained priests were allowed access to it. It sounds somewhat sublime, but that is how it seemed to us, the non-ordained.

**[Voronin]** And that is how it was. Incidentally, much of it has still been preserved, it is tradition... To make up for this the degree of danger grew, in particular when we had to make new detonators that would not explode in a fire or when struck, and would not work even if they were crushed. In general it was possible to make detonators less sensitive to heat and mechanical effects than those used in charges of conventional explosives.

**[Gubarev]** Was this in and of itself a major scientific discovery?

**[Voronin]** It was a gigantic step forward. A great scientific and technical achievement... Later there was a new requirement: We had to make weapons that would not result in a nuclear detonation in accidents, even partial, and even if an operator error occurred. That is, the scheme and design had to be such that in any catastrophe

or emergency there would not be a nuclear explosion. And that requirement was piously met several decades ago.

**[Gubarev] So this was impossible during the initial stage?**

**[Voronin]** Of course. The fault lay in the progress in our field and the understanding of the processes taking place during a nuclear explosion. It appeared as the result of tests and experiment and search. And so today no design can be put into production unless it possesses this safety feature... With the inclusion of tritium in the weapon, which, as is known, is highly toxic and radioactive, we immediately turned to the problem of preventing it from doing any harm whatever the circumstances.

**[Gubarev] What is especially dangerous about tritium?**

**[Voronin]** It is active. It easily enters the human body through the respiratory organs and the skin. Tritium dissolves in water and again easily enters the body. Although it has a relatively short half-life it is very dangerous. And we succeeded in taming it... Whereas in the early years with assemblies containing tritium we worked under dosimetric monitoring and people were protected by insulating tools and special facilities, now we guarantee total practical safety in work under normal conditions.

**[Gubarev] That is, without full suits?**

**[Voronin]** Normal conditions, as with any other equipment.

**[Gubarev] Is this another example of achievement?**

**[Voronin]** I would like to emphasize that our field develops quickly, and tasks must be resolved that would appear impossible to resolve. And each one of them is a major achievement for science and technology, this is very important. In science and modern technology stagnation is dangerous, and, moreover, fatal.

**[Gubarev] It is dangerous for you? I mean today?**

**[Voronin]** We have now entered a new stage. The weapons that remain after the deep cuts require a new approach. The fact that we stockpiled so many weapons was madness! There are about 50,000 warheads in the world—15,000 to 20,000 megatonnes. I repeat, this is madness. In my opinion, both for military purposes and for deterrence so many were not needed, and now even the most militarized circles understand this, regardless of whether they are on this side of the ocean or the other. And it is sensible that reduction talks are under way, only they should be conducted in a such a way that a nuclear balance is maintained at each stage of the reductions. If this balance is upset it will again lead to the destabilization of peace, and it is very important to maintain this balance because then, under threat of a retaliatory strike, no one will take it into his head to use nuclear weapons.

**[Gubarev] And is this really possible?**

**[Voronin]** During the first stage they thought that nuclear weapons were not intended for battlefield use.

But it is now clear that it is a political weapon, a weapon of deterrence. Reasonable people will never use them, but they do force any aggressor to refrain from adventurist decisions. Anyone who will or has devised something bad is perfectly well aware what he may sustain a terrible retaliatory strike.

**[Gubarev] You mentioned figures—"50,000 warheads and 20,000 megatonnes." If they were all exploded together what would happen to the planet?**

**[Voronin]** Every living thing would be destroyed many times over.

**[Gubarev] You have understood perfectly that so many weapons are not necessary. Why did no one protest?**

**[Voronin]** In my early years I did talk often with Andrey Dmitriyevich Sakharov. I was a designer and worked at a Kuhlman drafting unit, but the theoreticians, led by Sakharov and Zeldovich, often came to us. And involuntarily, when discussing design, we would touch on matters on the philosophical plane, for example, whether what we were doing was useful, what the consequences might be, and so forth. Andrey Dmitriyevich (and what a unique man he was!) would even calculate impromptu that if a bomb with such-and-such a yield were detonated, which generation might have gene mutations and who would suffer from what. And so as the result of such conversations, right from the start we were concerned about the consequences of the work that we were doing. When in time we had to deal with the problem of the effectiveness of nuclear weapons and the strategic balance, we paid attention to the more sober approach of the Americans; they worked systematically and did not waste resources senselessly. They had longer-term programs, more clearly defined goals, and they made cardinal changes in weapons every 10 or 15 years. Given our system of totalitarian, central leadership, they were constantly demanding changes, and essentially we developed new models every three or four years. Hence we had an enormous inventory of items. And excessive numbers. And this was waste and expense. We were aware of the real state of affairs and we expressed our negative opinion, but this kind of information was not carried up to the top levels. We have reports with detailed analysis of the state of affairs in the United States, and, incidentally, we still look very much at a disadvantage compared to the Americans. It could be seen that the work was not organized sensibly, but the people receiving this material from us and who had entree to the top echelons of power were, in my opinion, simply afraid to report it. For that might have caused an ambiguous reaction, first and foremost toward themselves.

**[Gubarev] Have you ceased this kind of work?**

**[Voronin]** Why? No. We are still engaged in it constantly.

**[Gubarev] It is important that you speak out in public otherwise it will all be repeated.**



[Voronin] Collegiality in decisions is essential. Earlier it used to be that the someone at the top would say all we had to do was comply, not judge but do, and that applied to everything!... And there was one other special feature: We copied the Americans a great deal, but we were in a different geopolitical position, and there were other tasks that built up with these terrible weapons, and it seemed that we had to have unique inventories and types of nuclear weapons, but in fact we often copied, and so we made unnecessary items.

**[Gubarev] Do you think that Sakharov expressed your general viewpoint when he came out from behind the barbed wire?**

[Voronin] It seems to me that Sakharov could have been more use here. For our business, of course. It certainly would have been easier for us... But he left. Andrey Dmitriyevich had many friends and supporters here, and perhaps together with him we would have been able to do much more. But there, out in the "big world," he remained alone... At first things were difficult without him. He was a calm man, but decisive. He maintained his views firmly and in most cases (this is my personal opinion) he was right.

**[Gubarev] We have good memories of Andrey Dmitriyevich, and he had good relations with those who worked at Arzamas-16.**

[Voronin] In his book he offers kind memories of many people. David Abramovich Fishman sat in this office, he was one of the founders of our design school, and a teacher for many of us designers. Sakharov wrote accurately about him. It was pleasant... It was interesting to work in those times.

**[Gubarev] Why?**

[Voronin] We were not burdened exclusively with living concerns. There were opportunities to give oneself up to the work, we even used to spend the night here. And we did not complain, it was difficult but interesting. At that time anything new was a breakthrough. Now we are essentially working to put the finishing touches on what was invented then... Well, for example, what is safety? We started working on it immediately, but now we are doing something different—bringing it to the necessary standard. So the blunt truth is that people say "everything has been done," but on the other hand this is not because it is just necessary to improve safety but because not all the possibilities of nuclear weapons have been discovered.

**[Gubarev] What complexities are involved in the problem of destroying nuclear weapons, and storing and dismantling them? Or is it a simple matter?**

[Voronin] No, there are enough complexities. They are that whereas previously in order to renew the arsenals we made so-and-so many munitions and dismantled so many, that is, there were normal work methods, the process now is different. In terms of utilization there are enormous volumes of weapons, and several problems

have arisen immediately. First, ensuring safety in transportation. Shipments of very dangerous freight have now increased sharply. And it is not a question of quality, but other factors: the state of the railroads themselves and of the rolling stock, the higher level of criminal activity, and unpredictable events, even that trains themselves may be fired on. Previously it was based on strict discipline and good organization. If a train was moving, nothing moved in the other direction, and nothing overtook it; it moved with cover on all sides. And an appropriate guard was set at all places where a train would be moving. And in general this was very rare. But now there might be several dozen kinds of transportation on the move.

**[Gubarev] But surely provision is made for all contingencies?**

[Voronin] Do not forget that a usual event in an unusual situation is dangerous in and of itself. And the situation now is not normal... Second, in and of itself the process of dismantling differs from the process of assembly and the danger is somewhat greater. Because of the age of the materials, while even the design is "compressed," and so forth. But in production we make provision for all measures, we are familiar with the technology, and we know how to act in any given situation... And of course, there are storage problems that we are working on. We have made provision for all technical measures to safeguard the technology but sometimes they are not successful because of political considerations. For this reason there should not be haste in our business... And of course, there is the final thing—storage of fissionable materials and monitoring them. There is one discrepancy here. For some reason they talk only about us monitoring them, but how do we store fissionable materials? In my opinion this is a common problem. If the Americans want to know how we are storing plutonium and uranium, then we should also be monitoring how they store them. There should be strict parity here. If we have things under wraps here, so do they. But today there is essentially no monitoring mechanism, and as far as I know no sensible talks about this are under way. There are demands from their side, but everything is still one-sided, and we cannot agree to such a situation and we must bring order on a parity basis. The control mechanism should be international, and the same for everyone.

**[Gubarev] Do you people, as developers, have psychological problems with the dismantling?**

[Voronin] I would say this: Weapons people always have special psychological features. We are dealing with a dangerous production, and this must affect a person. Like a combat engineer, there is no room for error. From the standpoint of dismantling and utilization, I think that no problems will arise here. For we are constantly talking about the excessive numbers of weapons and about cutbacks. So most of our specialists support sensible arms cutbacks, but they are so often depicted as "hawks," that is all.

[Gubarev] So the weapons are being dismantled. What can be used today or in the future? Or are we destroying them until nothing is left?

[Voronin] Costs are still greater than profits. There are few materials of which we have shortages. They are being utilized for second use, but our designs are not metal intensive and the proportion of metal in the structural elements is not great. There will be excess amounts of uranium-235 that can be used in the development of nuclear power engineering. Plutonium will also be available but its use is still a major question. It is obvious that it must be stored until better times, when scientists have devised a way to make use of it. Incidentally, even Andrey Dmitriyevich Sakharov in his time used to say that there will be prospects for using plutonium, but there is no possibility at present.

[Gubarev] If the Federal Nuclear Center is given the general task of deciding how to make use of weapons-grade plutonium, will you find a solution?

[Voronin] Undoubtedly, given appropriate funding and resources. Moreover, sooner or later this task will have to be solved. There are already certain ideas and proposals, but it is still a task for the future.

[Gubarev] There is a game that is very popular among journalists. This question is asked: "If I were the director..." Essentially you are this "director" and so I would like to pose something else: Imagine that you have become the president of Russia, what would you do with nuclear weapons in general in your field? Get up for a moment from your seat as chief designer and go across to the Kremlin...

[Voronin] I would do what we are proposing. First, arms reductions, and not simply cutbacks; they should be accompanied by a very careful balance and preservation of parity. Hence the moral: The composition and structure of nuclear weapons for the country at each stage of disarmament should be very precisely analyzed giving due consideration to the situation both with the Americans and in the world in general. In my opinion, consideration of these matters is impossible without nuclear specialists, and, moreover, is a mistake. Unfortunately, we are little involved and we have only a poor understanding of the level and of what recommendations are used, and what predictions for the future are used to make decisions. Some weapons are being left, others are being withdrawn, and I am convinced that in this process what we say should not be last in line. Perhaps it should be the first word, not the last. Our opinion should be heard because we are aware of the special features of our own designs and we really do know what should be in service and what should be withdrawn first. There is no hiding the fact that there are munitions that we, the designers, would not want to have in service. But if they are retained for reasons that do not depend on us that will be a bad thing. Unfortunately, we have already encountered cases of this kind. There are munitions that we have been trying to have withdrawn for 15 years or more, but our opinion notwithstanding they are not only

being retained but also reproduced. Perhaps now the situation is changing... Second, there are the initiatives by the initiators, but now is the time when it is necessary to compare proposals on reducing nuclear weapons with the status of nonnuclear defensive and offensive forces. The balance of power is determined not just by nuclear parity; there are systems that upset this. And this is a step toward destabilization in the world. These factors should be taken into account, but it seems to me that our Ministry of Foreign Affairs often pursues political initiatives and tries to gain authority and weight in the eyes of the public while forgetting about the purely military-technical considerations. Diplomats should consult with the specialists more often. For events may unfold in an unpredictable way, and as a result we may find ourselves under strong pressure. All kinds of centers for strategic studies have been set up in Russia, made up of former military people, and even just amateurs, and the government often listens to their opinions. And very often the results of their studies are presented as objective, even though all they are doing is fulfilling an order and reflecting the sentiments of particular groups in society. I do not dispute that the opinion of such centers should be taken into account, but they should not be used as a basis for execution without analyzing the others. Perhaps this kind of center for strategic studies should be set up also at Arzamas-16, for we are talking about very complex and very important problems, and they should not be given over to the complete control of nonprofessionals.

[Gubarev] You have been here for 38 years. Are you sorry for all those years?

[Voronin] You know, I am not!... Where would I have found more interesting and fascinating work? Nowhere, perhaps. It is for us unusual, unconventional. And indeed, where would I have been able to meet such a number of eminent people? And the most important thing is this: that I have been able to travel around the country and be in the most diverse kinds of collectives, and so I can say candidly that I have never encountered the kind of collective that we have had and have... And perhaps the mentality of its character is that if I start something I see it through to the end. And the collective really is unique. Its composition is more or less permanent, and it has splendid traditions; we ourselves fostered them and are constantly nurturing them. So there is satisfaction from work and life here. We absorbed the best there was in the country, and hence the high reliability and quality, and the attitude toward work. I believe that we have the best system for developing designs in the country. So that it would be unfair to want anything else...

[Gubarev] When was the most difficult time?

[Voronin] That is now. And not because I have become a chief designer; time was when we simply had to be concerned about our own business. We must neutralize interference by nonprofessionals in nuclear problems, and it is impossible to ignore such statements, because it is always more difficult to correct mistakes. So we have

to engage in "explanatory" work. Not only with the deputies, but also with journalists.

[Gubarev] I understand the allusion, so all that remains for me to do is thank you for the interview.

### Planned Defense Purchasing May Rise 10 Percent

93UM0028A Moscow LESNAYA GAZETA in Russian  
19 Sep 92 p 1

[Article by observer Valeriy Begishev under the rubric "Point of View": "The Defense Industry Is Gaining the Upper Hand"]

[Text] The Russian military-industrial complex has wrested another major concession from the government. The defense order for next year will increase by 10 percent. I say "another" and "wrested," because more than 43 billion rubles had already been allocated for maintaining the defense infrastructure and 42 billion for conversion programs somewhat earlier. One would therefore assume that it was not easy to come up with these funds.

The need to preserve the unique capability of the military industry, which will begin performing a good "civilian" service in the immediate future, was cited as justification for the decision. Acting Prime Minister in the Russian Cabinet Yegor Gaydar intimated in connection with this that previous drastic cuts in military outlays might have been premature.

It is not difficult to see that this is entirely in keeping with the logic of those in charge of the complex, according to which the defense industry (I quote from a recent issue of KRASNAYA ZVEZDA) is "one of the thriving sectors of the economy, the scientific, industrial and organizational capability of which will unquestionably continue to be an important aid in overcoming our overall crisis."

This quote shows that the VPK [military-industrial complex] has successfully cast aside Karl Marx, according to whose classic definition military outlays represent money down the drain from the economic standpoint. A state cannot be without an army, of course, and a certain portion of the nation's capital will inevitably have to continue to be spent on it in the future. The plan calls for around 716 billion rubles this year. Not much? But only 776 billion is allocated for the entire civilian economy. The lion's share of the money allocated for the Ministry of Defense will go to maintain the still extremely bloated numerical strength, of course. "Only" around 200 billion will go for the purchase of weapons and to pay for scientific development projects. That is, around 50,000 rubles per serviceman. In fact, at current prices, nobody knows the actual amount. But these outlays are not going into a void. We have mountains of weapons already.

Representatives of the VPK have recently made a vigorous effort to prove that not a very large portion of those stockpiles is suitable for use, however. We have spent money and spent money, and for what? Another KRASNAYA ZVEZDA article stated that in the division

of armaments among the republics, Russia got mainly old equipment and that no more than 20 percent of its arsenal actually meets modern requirements. The conclusion is obvious: We have to forge new weapons, which do "measure up."

This is one of the arguments. Another involves stressing the production of dual-purpose equipment. A special exhibition was just held to demonstrate that VPK plants are producing a lot of machinery of benefit to geologists, oil-field workers and many others.

Advertising of the VPK's export possibilities has recently been stepped up (and not without results).

There is some validity to all of this, of course, but it also involves a clear desire on the part of a significant number—if not a majority—of those in charge of the defense enterprises to preserve their special and untouchable status. One could mention the conference of representatives of labor collectives of ten branches of industry in the region of the capital held in Moscow at the end of August, among which the defense industry predominated. Those addressing the conference accused the government of not giving them proper protection and of paving its "road to the temple" with them. They demanded work and "decent pay," and ended by approving an ultimatum. The only rational speech was drowned out with hisses.

As we can see, the ultimatum is producing results.

### Aviation Association Director on Conversion Problems

93UM0008A Moscow KRASNAYA ZVEZDA in Russian  
30 Sep 92 pp 1, 2

[Interview with Anatoliy Mikhaylovich Petrov, general director of the Komsomolsk-na-Amure Aviation Production Association, by Colonel Aleksandr Andryushkov: "It Is Not Conversion Which Causes Unemployment"]

[Text] Anatoliy Mikhaylovich Petrov was born in 1941 at Parfino Station in Leningrad Oblast. In 1965, he completed the Novosibirsk Electrical Engineering Institute. After graduation, he was sent to the Aviation Plant imeni Yu.A. Gagarin in Komsomolsk-na-Amure.

He worked as a foreman, a deputy chief of the assembly shop, shop chief and deputy chief engineer. In 1980, he was appointed the director of a machine building plant which was under construction in Komsomolsk-na-Amure. Since November 1988, he has been the general director of the Komsomolsk-na-Amure Aviation Production Association.

[Andryushkov] Anatoliy Mikhaylovich, in spending time on my visit to your enterprise, I noted that the aircraft builders in Komsomolsk-na-Amure are humble people. They do not thump their chests, assuring each and everyone that their product is the best in the world. The aircraft themselves say this. A blue streak flashing above the earth, the Su-27 fighter causes excitement among the spectators, envy and respect among the specialists and in

the pilots a desire to fly on it. There is just one disconcerting thought and that is will the fighter now become the swan song of its creators?

[Petrov] From the production of the first R-6 (ANT-7) aircraft in 1936, our plant has worked for the good of the motherland. During the 5 war years it produced almost 3,000 IL-4 bombers. In 1941, they had already bombed Berlin. Immediately after the war they began building the Li-2 air transports for the economic needs of the nation. But the situation in the world developed in such a way that from the start of the 1950's, the plant again was a soldier, with jet equipment leaving the conveyor. Yes, the Su-27 fighter is at present its highest achievement. Unfortunately, it did not come into this world at the best of times. Over the last three years, storm clouds have gathered over the aviation industry, that is, over its enterprises producing military equipment.

[Andryushkov] By "storm clouds" you mean the reorientation in economic policy and which is based upon the converting of the defense industry from the production of military products to peaceful? But certainly many consider conversion the only way for the nation to emerge from the economic disasters.

[Petrov] You know, conversion is a subtle word. But it also includes the noble idea of our avoiding excessive military expenditures. This is on the one hand. On the other, I am convinced that someone wants to see the aviation industry destroyed in Russia.

Over the last 10 years, we have been moving to a definite goal, even though a mythical one, of making the finest fighter in the world and producing it with constant advanced modifications. I feel that the aircraft builders in Komsomolsk-na-Amure have achieved this. Since 1986, the SU-27 fighter has been in service with the Air Forces and the Air Defense Troops Aviation. There was the task of making as many of these aircraft as possible. It was hard but nothing compared with the current difficulties.

Several years ago, we felt that there was not enough manpower and not enough production capacity and machine tools. The reason was that the planning bodies of the former Union were of the habit every year of increasing the quota for the enterprises by 10-15 percent. But reason triumphed. During the last three years, we have been working, proceeding from the capacity which the plant has now, however without checking the output of the new modifications of the Su-27.

[Andryushkov] As is known, the initial stage of conversion made its adjustments into product output at the defense enterprises and the quotas for conversion were a complete surprise for many of them.

[Petrov] In using sports terminology, it was a low blow. The aviation plants began receiving quotas for producing products for which it would be easier to build a new plant than reconstruct an existing one. For example, the aviation engine builders in the defense industry were obliged to make carding machines, strainers for starch,

and we were given weighing-and-packing machines while it would have been better to make products for passenger aircraft. The designers of the fighters were forced to design equipment for removing the pits from fruit. A majority of the plants of the former Ministry of Aviation Industry remained virtually without work. These included Znamya Truda [Labor Banner] in Moscow, the defense enterprises in Nizhny Novgorod, Novosibirsk, Ulan-Ude and partially ours in Komsomolsk-na-Amure. As we said then, we had fallen under conversion like under an asphalt roller.

Of course, in and of itself conversion is blameless in this, and it is a question of the poorly-conceived carrying it out. In December of last year, we had an order to produce fighters for scores of millions of rubles. At the old prices. Contracts were concluded with the Air Forces, the Air Defense Troops and scores of Su-27 were made, and assembly was carried out in the shops. We spent large amounts of materials and the labor of the personnel. The plant hummed in a good working pace.

Suddenly in February 1992, I learned that the plant had no order-plan. Our products were not needed by anyone. By the end of March, it was scarcely possible to resolve with the client directorate the question of selling 30 percent of the aircraft from the supposedly existing plan. This year there would not be any more orders for the Su-27. For the many thousands of plant workers this was a disaster.

In every possible way we tried not to allow unemployment and to keep the personnel. We were helped by a backlog which we had built up at one time under the condition of the sale of the Su-27 abroad. As if we had anticipated the hard times. With government permission, we are presently selling the fighters to China. Having been forced to stop the production of the Su-27 for our Air Forces, we are rapidly carrying out foreign orders. For the plant these are "life-savers" since we sell them for foreign exchange and for barter. Let me repeat, the plant is forced to sell its goods on the outside. Otherwise it would not be able to survive. So we are provided with work until October. I am hoping that in the future the financial state of the plant will rectify itself. At present things reach a point at times that there is nothing to pay the workers with. We have introduced special checks and with them we can supply the personnel in the enterprise's stores. But we must also settle up with the credits which we took for those aircraft which the Ministry of Defense had ordered but did not buy. Currently the credit interest rate of our "kind" State Bank is 83 percent per annum. Highway robbery! What is it to take a billion rubles on credit and repay 1.83 billion? The plant will remain without any trousers on! The state itself is robbing us. We could obtain foreign currency without harming the interests of the workers.

We have proposals from other states for the sale of 1.5-2 score Su-27. The nation would received 1-2 billion dollars a year. At present there is much talk about the International Monetary Fund and we are hoping for its support, when just two domestic aviation plants could



obtain much foreign exchange for Russia. This alone would preserve the aviation industry in Russia, the defense capability of the nation would not suffer and the personnel would have work and goods for their own needs.

[Andryushkov] We have been told that conversion, like a cornucopia, would fill the shelves of our stores with consumer goods. The reality is that it is impossible to buy anything in state trade. Would not this result in the destruction of the high technologies of the defense enterprises?

[Petrov] The aviation plant in Komsomolsk-na-Amure each year produces up to 2,000 Amur motor launches with engines from Moskvich, pleasure sailboats of the Mikro class and motor-driven Fregat hang gliders, 200,000 children's bicycles, and approximately 200-300 sets of furniture a month. And how much housing, nurseries, schools and sociocultural facilities the plant has built for the city!

To a certain degree we have prepared for conversion, in working out the plans for civil aircraft. Certainly in the former Union they have virtually ceased to produce light aircraft and we shall be forced to purchase with hard currency the An-2 from Poland and the L-410 from Czechoslovakia. For us, the inhabitants of the Far East, to be without light aviation is like losing a leg and there are no roads; the expanses and the roadlessness are beyond any other type of transport. Before the foreign word "conversion" became fashionable, some five years ago we were giving thought to how the people could be provided with a mobile means of transport.

Unfortunately, at that time the load on the plant from the plans was such that not a single technical document was forthcoming. At present conversion is foremost and we are being rushed: give us a passenger aircraft! And no one seems to be bothered by the fact that time is needed to build it. But it is not a teapot with a whistle. We will hurry; we have made a blunder. The plant is hard at work on the S-80 aircraft for 25 passengers. But we are looking to tomorrow. We are making an aircraft which will be multipurpose: it would carry passengers and freight and if need be could become a flying medical center. But it will take 3-4 years to build such an aircraft, and we are told: mothball the construction of the Su-27, and produce the S-80. Just look to what this would lead.

The Su-27 fighter is a complex aircraft stuffed with electronics and which is completely unnecessary in the civil aircraft. Hence hundreds of electronics specialists will be without anything to do. We shall be forced to dismiss them or requalify them.

[Andryushkov] From our discussion it follows that conversion has not provided the plant with anything except disaster. Would you not consider it better for the plant to produce only combat aircraft, particularly as there are few Su-27 aircraft in Russia and where they are found the pilots use up their service life, but the commander of a local air regiment does not bother himself with the supply of spare parts?

[Petrov] The Su-27 has brought the Amur aircraft builders to the world level. It is a complicated matter to move from the production of the fighter to a light aircraft. We shall have to accept losses and we will lose something. But the losses should be minimal. Let me repeat, the main thing is to save the personnel. The plant over the four years has lost thousands of highly skilled workers. You might wonder where they can go? Everywhere is jammed with manpower. But our specialists are being "picked up" by various cooperatives and small enterprises. Skilled hands are valued by everyone, with the exception, unfortunately, of the state.

To these thousands add another 1,000-1,500 who retire every year on a pension. This is the backbone on which the plant has relied for almost 60 years, the people who gave the motherland wings. And the most terrible thing is that there is no new generation. Poorly conceived conversion has destroyed not only the high technologies but it has also crushed the hearts of people. The plant's worker dynasties are collapsing. This is the greatest misfortune.

I at times am asked how are things at our plant with the nationality question? I answer everything is normal. The city was built by the entire people of the former Union, at the aircraft at the plant are being built jointly by Russians, Ukrainians, Tatars, Belarusians, Uzbeks and Moldavians. They work well! Like the roots of the trees, kinship ties have long been in existence. Although last year, agents from the "near" overseas [the former republics] descended on the plant and applied psychological pressure to their compatriots, why not live in one's motherland? The departure for nationality reasons has been seen and we cannot help but note this. But how can the people be stopped? By jobs! A man cannot live without something to do.

[Andryushkov] Anatoliy Mikhkaylovich, the Su-27 fighter is recognized throughout the world as a mighty, terrible weapon. But millions of spectators have exclaimed over them as a beautiful aircraft at the international shows in Paris, the U.S., Singapore, Moscow...

[Petrov] I understand what you are saying. The Su-27 is a beautiful aircraft and it operates beautifully in the sky. It is both a defender and an athlete. The fighter, in fully repaying its production, can enrich the state. The manufacturer plant, without curtailing the output of the Su-27, is moving smoothly to the construction of civil aircraft. But during the six years of conversion, aside from empty discussions, the plant does not have a single concrete proposal, a single working drawing. In addition, professional ties have been broken with the related plants, with the suppliers of preassembled parts from the other republics. The contracts are not being filled. Everything is being done on a level of personal relations. As the director I must rush about not only on the territory of the former Union, but beyond...

[Andryushkov] But is it worth it, Anatoliy Mikhkaylovich, to make such sacrifices?

[Petrov] It is. My dream is that the plant always has work. For this reason I have sent a letter to the Russian President on behalf of the entire plant collective, I have described the critical situation, how the plant has ended up in the poor house, and the approaching unemployment, and I have proposed to the Russian Government that they review our arguments for emerging from the crisis.

### **Tula Advertises 'Kashtan' Missile-Artillery Air Defense System**

93UM0029A Moscow KRSNAYA ZVEZDA in Russian  
3 Oct 92 p 7

[Unattributed article: "Tulskiy Mashinostroitelnyy Zavod State Enterprise Offers the 'Kashtan' Missile-Artillery System"]

[Text] The system consists of a command module and, depending on the importance of the defended facility, from one to six combat modules.

#### **The 'Kashtan' System Ensures:**

- dependable protection of a facility from high-precision offensive airborne weapons (cruise missiles, guided bombs etc.) at altitudes from 4,000 m to minimal. It can also defeat small sea and land targets;
- effective protection of a facility due to a high kill probability of targets by missile armament at a range from 8,000 to 1,500 m, followed by their successive engagement by artillery armament down to a range of 500 m;
- a high ability to stand up in combat due to the use of an integrated command and control system and presence of a target and missile simultaneous tracking channel operating in radar and optical television modes;
- full automation of combat operation from detection to destruction, and the capability to fire on up to six targets per minute.

Modular design, low weight and small size make it possible to locate the system aboard surface ships ranging from missile boats to aircraft carriers, and on terrestrial facilities.

The system weighs not more than 13,500 kg (one command module + one combat module).

The height of the turret mount of the combat module is not more than 2,250 mm.

The sweep radius of the turret mount is not more than 2,760 mm.

#### **Armament of the 'Kashtan' System**

##### **Surface-to-Air Guided Missile**

A two-stage solid-propellant missile with continuous-rod fragmentation warhead and proximity fuze target sensor.

The missile is delivered in a shipping-launching canister, and it possesses the following size and weight characteristics:

Weight, mm—2,632

Diameter, mm—170

Weight, kg—60

#### **Artillery Armament**

Consists of two 30-mm automatic antiaircraft guns with a linkless feed system and a self-contained evaporative cooling system.

The multiple mount is capable of firing a total of 10,000 rounds per minute.

Address: 2, Mosin St., 300002, Tula, Russia.

Telephone: (0872) 31-74-65. Telex: 253114 ALFA SU.

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### **China Said to be Uninterested in 'Varyag'**

93UM0066A Moscow KRSNAYA ZVEZDA in Russian  
13 Oct 92 p 3

[Unattributed article: "Beijing Will Not Purchase Warships from the Ukraine as Stated by the PRC Minister of Foreign Affairs"]

[Text] China does not intend to acquire an aircraft-carrying carrier from Ukraine. This was announced by PRC Minister of Foreign Affairs Qian Qichen at a meeting in Beijing with H. Mitsuzuka, prominent government official in Japan's Liberal Democratic Party.

The mass media have been stirring up rumors in recent months that China intends to purchase one of the Varyag heavy aircraft-carrying cruisers built at the Nikolayev Shipbuilding Plant, which have a displacement of 67,500 tonnes and carry a price tag of 2.4 billion dollars, to be used, among other things, to back up its territorial claims in the South China Sea.

### **Krasnoyarsk Plutonium Plant Faces Conversion**

PM2110145192 Moscow KOMSOMOLSKAYA  
PRAVDA in Russian 20 Oct 92 p 2

[Report by V. Nelyubin: "Mountains Cause Misfortune from Excess of Cleverness"]

[Text] Our "rafik" moved off from the asphalt and slowly stumbled along the sleepers of the railroad track disappearing into the tunnel. The outwardly utterly unremarkable "hole" in the mountain quite rapidly displayed its extraordinariness. And it was not even a matter of its length or the several locked gates and the three document checks. The poet was wrong, it turns out that not all "tunnels emerge into the light." Our tunnel led deep into the Siberian ore mines, into a gigantic underground city whose three galleries accommodate the shops of what only yesterday was a top secret establishment—the Krasnoyarsk mining and chemical combine. Here, 200 meters down, far from curious eyes, weapons-grade plutonium has been produced for the past 35 years.

Beria's department started work here back in the late forties. Over 60,000 prisoners chipped at the intransigent Sayanskiy rocks, digging deeper and deeper into the ground. In 1953, after the death of the father and

teacher, they were replaced by military construction workers. And five years later the first nuclear reactor started to operate here—Siberian plutonium had arrived. On the rocky shore of the Yenisey it was not even a metropolis but something more imposing without, so the specialists say, a counterpart in the world, which was carved out. Its dimensions may be judged by the fact that every hour 5.5 million cubic meters of air are pumped underground into the combine's shops and living premises.

Today the combine is experiencing hard times. Two of its three reactors have been stopped: The international situation has changed and requirements for weapons-grade plutonium have declined drastically.

"We are accelerating the pace of conversion," says Pavel Morozov, the combine's deputy chief engineer. "We have set up the production of printed circuit boards, transformer units, and scans [razvertki] for the 'Rassvet' monochrome television sets produced in Krasnoyarsk. We have concluded a contract with the Samsung firm..."

But all this is in the long term, and meanwhile production profitability is falling and because of the lack of funds housing construction is having to be curtailed and a conflict is developing in the collective over the unsatisfactory wages. But the most alarming thing is that today the direction in which the combine will develop further is unclear. Its leading specialists are convinced that the only correct path is the further development and improvement of the processing and storage of used fuel from nuclear power stations. (Today the only storage facility in the CIS for waste from reactors of the VVER-1000 type is at Krasnoyarsk-26).

## MILITARY CONFLICT, FOREIGN MILITARY AFFAIRS

### Use of Cruise Missiles in Persian Gulf War

93UM0040A Moscow KRYLYA RODINY in Russian  
No 6, 1992 (signed to press 9 Apr 92) pp 18-19

[Continuation of unattributed article: "Persian Gulf: The Air War"]

[Text] It was believed in the 1950's that a guided missile would become the principal means of warfare, replacing traditional aviation and artillery, which led to rejection of many programs in the military aircraft construction area both in our country and abroad. Subsequently, as we know, this viewpoint was recognized to be erroneous: the report of the demise of manned aviation turned out to be "somewhat premature." Persian Gulf war experience reaffirmed the enormous capabilities of combat aircraft. At the same time, it should be admitted that the majority of missile systems in the inventory of both belligerent sides did not completely justify the hopes placed on them.

American BGM-109C TLAM/C and BGM-109 TLAM/D Tomahawk cruise missiles operated the most successfully. They were launched from Los Angeles-Class

nuclear powered multirole submarines (12 such missiles are accommodated in special vertical tubes installed in the submarine's forward section outside her pressure hull) deployed in the Mediterranean, Red and Arabian seas, and from the battleships Missouri and Wisconsin.

In the first 24 hours of the conflict around 100 cruise missiles were launched against Iraq, the majority of which reached the targets (for example, 51 of 52 missiles in the first salvo hit the targets).

The BGM-109D missile of the latest modification, which became operational right before the beginning of the conflict, as well as the older BGM-109C cruise missiles were employed during combat operations. Both types of cruise missiles are supplied with the TERCOM correlation system for determining the missile's position with respect to terrain relief over which it is flying. Here a special radioaltimeter, turning on over specific segments of time, performs radar mapping. Results are compared with a standard relief recording made earlier with the help of an Earth satellite or reconnaissance aircraft.

TERCOM system data are correlated by means of an inertial navigation system, which is the sole source of navigation data during the missile's flight over the sea or flat surface, where terrain relief is absent. In the terminal phase of the trajectory, just ahead of the target, the DSMAC optical digital correlation system is activated, which compares data received by a television sensor with the digital image of the target and area contiguous with it loaded in the onboard computer memory. The circular error probable [CEP] of the Tomahawks was several meters.

The sharp reduction in accuracy (by an order of magnitude) at night and in adverse weather conditions, when the DSMAC optical system cannot operate, should be included among the shortcomings of such a navigation system.

The BGM-109C cruise missile is equipped with a single (nonmultiple) warhead weighing 450 kg armed with 340 kg of conventional explosives. The BGM-109D, intended for destroying area targets, is fitted with a cluster warhead with 166 submunitions. The maximum launch range of the cruise missile is 1,100 km (launch range is doubled when they are fitted with the lighter nuclear warhead).

During combat operations in the Persian Gulf the U.S. Air Force also employed the AGM-86 ALCM air-launched cruise missiles for the first time against Iraq. They were initially created for delivering nuclear strikes against USSR territory. They were refitted with a warhead with conventional explosives.

These missiles were employed against eight especially important communications and air defense targets as well as against air targets located in northern Iraq in the area of the city of Mosul. Seven B-52G aircraft launched a sum total of 35 cruise missiles. The bombers, which took off from Barksdale Air Force Base (Louisiana),

spent 34 hours 20 minutes in the air. During the flight they went 80 km deep into Saudi Arabian territory, where they carried out the missile launches.

It is interesting to note that earlier, during the combat operations and during the half-year after their conclusion, the open American press did not report the presence of a modification of the AGM-86 ALCM cruise missile with nonnuclear warhead in the USAF inventory or about the use of this type of missile in combat operations against Iraq. It was believed that all allied tactical aircraft activated for the conflict were based on the Arabian Peninsula and territory of Turkey, and B-52 bombers which performed carpet bombing with free-fall bombs flew from the territory of Great Britain and the island of Diego Garcia (Indian Ocean).

Despite success of employing cruise missiles on the first day of the conflict, the Iraqi side subsequently learned to shoot them down with the help of Soviet-made Osa SAM systems and the Shilka small-caliber anti-aircraft guns (ZSU-4-23). Tethered balloons—seemingly a long forgotten air defense weapon—also became a serious obstacle for low-flying cruise missiles. There were more frequent instances of the failure of cruise missile systems (the fatigue and combat stress of seamen supporting the combat launches obviously told), but on the whole, the cruise missiles showed rather high effectiveness during the conflict.

The Iraqi "weapons of retribution"—Soviet-made R-300 tactical ballistic missiles (known in the West as "Scud") and their Iraqi modifications Al-Hussein and Al-Abbas created with the help of British and German specialists, gave a considerably less successful account of themselves.

The R-150 missile was created in the USSR in the mid-1950's as a tactical nuclear weapon delivery platform (its naval version also appeared, intended for launching from surfaced submarines). In contrast to American guided missiles of similar purpose, transported separately from the launcher and installed on it right before launch, the Soviet missile was transported and launched from a chassis made on the base of the IS-3 heavy tank. An improved version of the system, the R-300, was created somewhat later, in the early 1980's. It had an increased launch range and a new launcher made on the base of the MAZ-534 Uragan four-axle cross country vehicle.

The missile was supplied with a liquid-fuel rocket engine; it took around an hour for fueling before the launch (at this time it already was placed vertically on the launch pad); the CEP was rather large, around one km, but this did not have special significance for firing nuclear weapons. In the 1970's the R-300 was delivered to many foreign states, including Iraq.

In attempting to acquire his own strategic weapons for bombarding Iranian cities, Iraqi leader Saddam Hussein sanctioned creation of Scud variants with increased range. Initially the Al-Hussein missile appeared which, like the Soviet version of the guided missile, was launched from a launcher based on the Uragan; subsequently the larger Al-Abbas missile was created, which no longer fit on the MAZ. A launcher based on the Swedish SAAB-Scania heavy-duty truck trailer was made for transporting and launching it. The off-road capability of the system fell off sharply, but on the other hand, an opportunity appeared to bring the launch range to 900 km.

The Al-Hussein and Al-Abbas were employed in the concluding stage of the Iran-Iraq war, delivering strikes against major enemy cities. According to some reports, Iraqi guided missiles were supplied with single chemical warheads, which made them a simple and rather effective mass destruction weapon.

But the Iraqi-Anglo-German modernization of the old Soviet missile did not leave it without a trace: accuracy on target was considerably reduced, the longer Al-Abbas already required 1.5 hours for fuelling before launch, and system reliability dropped.

By the way, thanks to their mobility (albeit limited), even such "faulty" missiles proved almost invulnerable to the allies' aerial reconnaissance assets and strike aviation. Moving over roads of southwestern Iraq by night, the missile trains would move to preplanned, surveyed positions. This permitted saving time setting the inertial guidance system. The launch would occur 1.5-2 hours after occupying the launch position. Despite the enormous prelaunch preparation time compared with modern Soviet and American guided missiles (for example, it is measured in a few minutes for the Osa system), vehicles with empty launchers had time to take cover in the night long before the appearance of allied aircraft in the launch position area.

*To be continued.*

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